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Mr. *S M A R T*'s  
**T A B L E S**  
OF  
Interest, &c.

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# T A B L E S

O F

Interest, Discount,

Annuities,

&c.

By *J O H N S M A R T*,  
of *Guildhall London, Gent.*

P S A L M L X I I . 10.

*If Riches increase, set not your Heart upon them.*

Crescentem sequitur cura Pecuniam,  
Majorumque fames.

— Bene est cui Deus obtulit  
Parcâ, quod satis est, manu. *Hor. Lib. 3. Ode 16.*

L O N D O N,

Printed by *J. D A R B Y* and *T. B R O W N E* in *Bartholomew-Close.*  
M D C C X X V I .

T O

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*John Lordell* Esq;  
*John Nicoll* Esq; and  
 The Honourable *Horatio Townshend* Esq; DIRECTORS

of the

BANK of ENGLAND;

These Tables of Interest, &amp;c.

*are humbly Dedicated**by their most Obedient Servant,*

JOHN SMART.

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# TABLES OF INTEREST, &c.

FOR the better understanding of the following Tables, it is necessary to say something of Decimal Fractions, the Nature of which may be easily apprehended, by considering, That  
As Whole Numbers increase in a Decimal Proportion, by the Addition of Cyphers to the right Hand; so, on the contrary, Decimal Fractions decrease in the same Proportion, by the Addition of Cyphers to the left.

- As ——— 10 is Ten Unites.  
 100 ——— One hundred.  
 1000 ——— One thousand.  
 10000 ——— Ten thousand.  
 100000 ——— One hundred thousand, &c.
- So ——— .1 ——— is One tenth Part of an Unite.  
 .01 ——— One hundredth Part.  
 .001 ——— One thousandth Part.  
 .0001 ——— Ten thousandth Part.  
 .00001 ——— One hundred thousandth Part, &c.

For the Denominator of a Decimal Fraction is always an Unite, with so many Cyphers to the right Hand, as there are Places in the Decimal Fraction.  
 Therefore Cyphers on the right Hand of a Decimal Fraction, alter not the Value; .5 being  $\frac{5}{10}$ , .50  $\frac{50}{100}$ , .500  $\frac{500}{1000}$ , &c. each of them being equal to one half of an Unite.  
 Decimal Fractions are distinguished from whole Numbers, by a Point, or Comma, placed before them.  
 Addition, Subtraction, Multiplication, and Division of Decimals, are all of them performed as in whole Numbers, observing these few Rules; viz.  
 In Addition and Subtraction, to place the Points of Distinction one under the other.  
 In Multiplication, to separate with a Point so many Places of the Product to the right Hand, as there are Decimal Places both in the Multiplicand and Multiplier; and if there are not so many Places in the Product, then to add Cyphers to the left Hand, till there are so many Places.  
 In Division, to separate with a Point so many Places of the Quotient to the right, as there are Decimal Places in the Dividend more than are in the Divisor; and if there are not so many Places, then to add Cyphers to the left, till there are so many.  
 And by adding Cyphers to the right Hand of the Dividend, any lesser Number given may be divided by a greater.

### ERRATA.

Page 30. even with 47. and under $3\frac{1}{2}$ per Cent. for .0044,8633 read .0044,8663
36. ——— 165. ——— $4\frac{1}{2}$ ——— .0199,3699 ——— .0199,3690
83. ——— 95. ——— 8 ——— .4919,5064 ——— .4916,5064
91. ——— 99 $\frac{1}{2}$ ——— 9 ——— .0900,1770 ——— .0900,1700

Examples in Addition.

<u>.034375</u>	<u>.183333</u>	<u>23.2375</u>	<u>372.5125</u>
<u>.139583</u>	<u>.229167</u>	<u>.734375</u>	<u>145.266667</u>
<u>.340625</u>	<u>2.125</u>	<u>42.58125</u>	<u>769.1375</u>
<u>.441667</u>	<u>3.234375</u>	<u>.936458</u>	<u>938.083333</u>
<u>.95625</u>	<u>5.771875</u>	<u>67.489583</u>	<u>2225.</u>

Examples in Subtraction.

<u>.240625</u>	<u>.934375</u>	<u>7.6875</u>	<u>267.5</u>
<u>.088542</u>	<u>.239583</u>	<u>2.746875</u>	<u>136.345833</u>
<u>.152083</u>	<u>.694792</u>	<u>4.940625</u>	<u>131.154167</u>

Examples in Multiplication.

Multiplicand, .95	.125	25.525	653.	423.
Multiplier, .25	.075	.75	.125	2.25
Product, <u>.2375</u>	<u>.009375</u>	<u>19.14375</u>	<u>81.625</u>	<u>951.75</u>

  

Multiplicand, 372.775	127.025	.003125
Multiplier, 16.25	154.	800.
Product, <u>6057.59375</u>	<u>19561.85</u>	<u>2.5</u>

Examples in Division.

Divisor.	Dividend.	Quotient.
.25)	.2375	(.95
.125)	.009375	(.075
.75)	19.14375	(25.525
653.)	81.625	(.125
2.25)	951.75	(423.
16.25)	6057.59375	(372.775
127.025)	19561.85	(154.
800.)	2.500000	(.003125

To reduce a Vulgar Fraction to a Decimal of the same Value, divide the Numerator by the Denominator, and the Quotient will be the Decimal Fraction required.  
 And, to reduce a Decimal Fraction to a Vulgar, multiply the Decimal by the Denominator of the Vulgar, and the Product will be the Vulgar Fraction required.  
 But to prevent the Trouble of such Reduction, the following Table is made.

Shillings

Shillings, Pence, and Farthings, reduced to the Decimal Parts of a Pound.

s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts
1	.0010,4167	1	.0510,4167	2	.1010,4167	3	.1510,4167	4	.2010,4167
1	.0020,8333	1	.0520,8333	2	.1020,8333	3	.1520,8333	4	.2020,8333
1	.0031,25	1	.0531,25	2	.1031,25	3	.1531,25	4	.2031,25
1	.0041,6667	1	.0541,6667	2	.1041,6667	3	.1541,6667	4	.2041,6667
1 1/4	.0052,0833	1 1/4	.0552,0833	2 1/4	.1052,0833	3 1/4	.1552,0833	4 1/4	.2052,0833
1 1/2	.0062,5	1 1/2	.0562,5	2 1/2	.1062,5	3 1/2	.1562,5	4 1/2	.2062,5
1 3/4	.0072,9167	1 3/4	.0572,9167	2 3/4	.1072,9167	3 3/4	.1572,9167	4 3/4	.2072,9167
2	.0083,3333	1 1/2	.0583,3333	2 1/2	.1083,3333	3 1/2	.1583,3333	4 1/2	.2083,3333
2 1/4	.0093,75	1 3/4	.0593,75	2 3/4	.1093,75	3 3/4	.1593,75	4 3/4	.2093,75
2 1/2	.0104,1667	1 3/4	.0604,1667	2 3/4	.1104,1667	3 3/4	.1604,1667	4 3/4	.2104,1667
2 3/4	.0114,5833	1 3/4	.0614,5833	2 3/4	.1114,5833	3 3/4	.1614,5833	4 3/4	.2114,5833
3	.0125	1 3/4	.0625	2 3/4	.1125	3 3/4	.1625	4 3/4	.2125
3 1/4	.0135,4167	1 3/4	.0635,4167	2 3/4	.1135,4167	3 3/4	.1635,4167	4 3/4	.2135,4167
3 1/2	.0145,8333	1 3/4	.0645,8333	2 3/4	.1145,8333	3 3/4	.1645,8333	4 3/4	.2145,8333
3 3/4	.0156,25	1 3/4	.0656,25	2 3/4	.1156,25	3 3/4	.1656,25	4 3/4	.2156,25
4	.0166,6667	1 3/4	.0666,6667	2 3/4	.1166,6667	3 3/4	.1666,6667	4 3/4	.2166,6667
4 1/4	.0177,0833	1 3/4	.0677,0833	2 3/4	.1177,0833	3 3/4	.1677,0833	4 3/4	.2177,0833
4 1/2	.0187,5	1 3/4	.0687,5	2 3/4	.1187,5	3 3/4	.1687,5	4 3/4	.2187,5
4 3/4	.0197,9167	1 3/4	.0697,9167	2 3/4	.1197,9167	3 3/4	.1697,9167	4 3/4	.2197,9167
5	.0208,3333	1 3/4	.0708,3333	2 3/4	.1208,3333	3 3/4	.1708,3333	4 3/4	.2208,3333
5 1/4	.0218,75	1 3/4	.0718,75	2 3/4	.1218,75	3 3/4	.1718,75	4 3/4	.2218,75
5 1/2	.0229,1667	1 3/4	.0729,1667	2 3/4	.1229,1667	3 3/4	.1729,1667	4 3/4	.2229,1667
5 3/4	.0239,5833	1 3/4	.0739,5833	2 3/4	.1239,5833	3 3/4	.1739,5833	4 3/4	.2239,5833
6	.025	1 3/4	.075	2 3/4	.125	3 3/4	.175	4 3/4	.225
6 1/4	.0260,4167	1 3/4	.0760,4167	2 3/4	.1260,4167	3 3/4	.1760,4167	4 3/4	.2260,4167
6 1/2	.0270,8333	1 3/4	.0770,8333	2 3/4	.1270,8333	3 3/4	.1770,8333	4 3/4	.2270,8333
6 3/4	.0281,25	1 3/4	.0781,25	2 3/4	.1281,25	3 3/4	.1781,25	4 3/4	.2281,25
7	.0291,6667	1 3/4	.0791,6667	2 3/4	.1291,6667	3 3/4	.1791,6667	4 3/4	.2291,6667
7 1/4	.0302,0833	1 3/4	.0802,0833	2 3/4	.1302,0833	3 3/4	.1802,0833	4 3/4	.2302,0833
7 1/2	.0312,5	1 3/4	.0812,5	2 3/4	.1312,5	3 3/4	.1812,5	4 3/4	.2312,5
7 3/4	.0322,9167	1 3/4	.0822,9167	2 3/4	.1322,9167	3 3/4	.1822,9167	4 3/4	.2322,9167
8	.0333,3333	1 3/4	.0833,3333	2 3/4	.1333,3333	3 3/4	.1833,3333	4 3/4	.2333,3333
8 1/4	.0343,75	1 3/4	.0843,75	2 3/4	.1343,75	3 3/4	.1843,75	4 3/4	.2343,75
8 1/2	.0354,1667	1 3/4	.0854,1667	2 3/4	.1354,1667	3 3/4	.1854,1667	4 3/4	.2354,1667
8 3/4	.0364,5833	1 3/4	.0864,5833	2 3/4	.1364,5833	3 3/4	.1864,5833	4 3/4	.2364,5833
9	.0375	1 3/4	.0875	2 3/4	.1375	3 3/4	.1875	4 3/4	.2375
9 1/4	.0385,4167	1 3/4	.0885,4167	2 3/4	.1385,4167	3 3/4	.1885,4167	4 3/4	.2385,4167
9 1/2	.0395,8333	1 3/4	.0895,8333	2 3/4	.1395,8333	3 3/4	.1895,8333	4 3/4	.2395,8333
9 3/4	.0406,25	1 3/4	.0906,25	2 3/4	.1406,25	3 3/4	.1906,25	4 3/4	.2406,25
10	.0416,6667	1 3/4	.0916,6667	2 3/4	.1416,6667	3 3/4	.1916,6667	4 3/4	.2416,6667
10 1/4	.0427,0833	1 3/4	.0927,0833	2 3/4	.1427,0833	3 3/4	.1927,0833	4 3/4	.2427,0833
10 1/2	.0437,5	1 3/4	.0937,5	2 3/4	.1437,5	3 3/4	.1937,5	4 3/4	.2437,5
10 3/4	.0447,9167	1 3/4	.0947,9167	2 3/4	.1447,9167	3 3/4	.1947,9167	4 3/4	.2447,9167
11	.0458,3333	1 3/4	.0958,3333	2 3/4	.1458,3333	3 3/4	.1958,3333	4 3/4	.2458,3333
11 1/4	.0468,75	1 3/4	.0968,75	2 3/4	.1468,75	3 3/4	.1968,75	4 3/4	.2468,75
11 1/2	.0479,1667	1 3/4	.0979,1667	2 3/4	.1479,1667	3 3/4	.1979,1667	4 3/4	.2479,1667
11 3/4	.0489,5833	1 3/4	.0989,5833	2 3/4	.1489,5833	3 3/4	.1989,5833	4 3/4	.2489,5833
12	.05	1 3/4	.1	2 3/4	.15	3 3/4	.2	4 3/4	.25

Shillings, Pence, and Farthings, reduced to the Decimal Parts of a Pound.

Table with 5 columns of 's. d.' and 'Decim. Parts' values, ranging from 5 5 to 6 7.

Shillings, Pence, and Farthings, reduced to the Decimal Parts of a Pound.

Table with 5 columns of 's. d.' and 'Decim. Parts' values, ranging from 10 10 to 15 7.

Shillings, Pence, and Farthings, reduced to the Decimal Parts of a Pound.

s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts	s. d.	Decim. Parts
15 1	.7510,4167	16 1	.8010,4167	17 1	.8510,4167	18 1	.9010,4167	19 1	.9510,4167
15 2	.7520,8333	16 2	.8020,8333	17 2	.8520,8333	18 2	.9020,8333	19 2	.9520,8333
15 3	.7531,25	16 3	.8031,25	17 3	.8531,25	18 3	.9031,25	19 3	.9531,25
15 4	.7541,6667	16 4	.8041,6667	17 4	.8541,6667	18 4	.9041,6667	19 4	.9541,6667
15 1 1/4	.7552,0833	16 1 1/4	.8052,0833	17 1 1/4	.8552,0833	18 1 1/4	.9052,0833	19 1 1/4	.9552,0833
15 1 1/2	.7562,5	16 1 1/2	.8062,5	17 1 1/2	.8562,5	18 1 1/2	.9062,5	19 1 1/2	.9562,5
15 1 3/4	.7572,9167	16 1 3/4	.8072,9167	17 1 3/4	.8572,9167	18 1 3/4	.9072,9167	19 1 3/4	.9572,9167
15 2	.7583,3333	16 2	.8083,3333	17 2	.8583,3333	18 2	.9083,3333	19 2	.9583,3333
15 2 1/4	.7593,75	16 2 1/4	.8093,75	17 2 1/4	.8593,75	18 2 1/4	.9093,75	19 2 1/4	.9593,75
15 2 1/2	.7604,1667	16 2 1/2	.8104,1667	17 2 1/2	.8604,1667	18 2 1/2	.9104,1667	19 2 1/2	.9604,1667
15 2 3/4	.7614,5833	16 2 3/4	.8114,5833	17 2 3/4	.8614,5833	18 2 3/4	.9114,5833	19 2 3/4	.9614,5833
15 3	.7625	16 3	.8125	17 3	.8625	18 3	.9125	19 3	.9625
15 3 1/4	.7635,4167	16 3 1/4	.8135,4167	17 3 1/4	.8635,4167	18 3 1/4	.9135,4167	19 3 1/4	.9635,4167
15 3 1/2	.7645,8333	16 3 1/2	.8145,8333	17 3 1/2	.8645,8333	18 3 1/2	.9145,8333	19 3 1/2	.9645,8333
15 3 3/4	.7656,25	16 3 3/4	.8156,25	17 3 3/4	.8656,25	18 3 3/4	.9156,25	19 3 3/4	.9656,25
15 4	.7666,6667	16 4	.8166,6667	17 4	.8666,6667	18 4	.9166,6667	19 4	.9666,6667
15 4 1/4	.7677,0833	16 4 1/4	.8177,0833	17 4 1/4	.8677,0833	18 4 1/4	.9177,0833	19 4 1/4	.9677,0833
15 4 1/2	.7687,5	16 4 1/2	.8187,5	17 4 1/2	.8687,5	18 4 1/2	.9187,5	19 4 1/2	.9687,5
15 4 3/4	.7697,9167	16 4 3/4	.8197,9167	17 4 3/4	.8697,9167	18 4 3/4	.9197,9167	19 4 3/4	.9697,9167
15 5	.7708,3333	16 5	.8208,3333	17 5	.8708,3333	18 5	.9208,3333	19 5	.9708,3333
15 5 1/4	.7718,75	16 5 1/4	.8218,75	17 5 1/4	.8718,75	18 5 1/4	.9218,75	19 5 1/4	.9718,75
15 5 1/2	.7729,1667	16 5 1/2	.8229,1667	17 5 1/2	.8729,1667	18 5 1/2	.9229,1667	19 5 1/2	.9729,1667
15 5 3/4	.7739,5833	16 5 3/4	.8239,5833	17 5 3/4	.8739,5833	18 5 3/4	.9239,5833	19 5 3/4	.9739,5833
15 6	.775	16 6	.825	17 6	.875	18 6	.925	19 6	.975
15 6 1/4	.7760,4167	16 6 1/4	.8260,4167	17 6 1/4	.8760,4167	18 6 1/4	.9260,4167	19 6 1/4	.9760,4167
15 6 1/2	.7770,8333	16 6 1/2	.8270,8333	17 6 1/2	.8770,8333	18 6 1/2	.9270,8333	19 6 1/2	.9770,8333
15 6 3/4	.7781,25	16 6 3/4	.8281,25	17 6 3/4	.8781,25	18 6 3/4	.9281,25	19 6 3/4	.9781,25
15 7	.7791,6667	16 7	.8291,6667	17 7	.8791,6667	18 7	.9291,6667	19 7	.9791,6667
15 7 1/4	.7802,0833	16 7 1/4	.8302,0833	17 7 1/4	.8802,0833	18 7 1/4	.9302,0833	19 7 1/4	.9802,0833
15 7 1/2	.7812,5	16 7 1/2	.8312,5	17 7 1/2	.8812,5	18 7 1/2	.9312,5	19 7 1/2	.9812,5
15 7 3/4	.7822,9167	16 7 3/4	.8322,9167	17 7 3/4	.8822,9167	18 7 3/4	.9322,9167	19 7 3/4	.9822,9167
15 8	.7833,3333	16 8	.8333,3333	17 8	.8833,3333	18 8	.9333,3333	19 8	.9833,3333
15 8 1/4	.7843,75	16 8 1/4	.8343,75	17 8 1/4	.8843,75	18 8 1/4	.9343,75	19 8 1/4	.9843,75
15 8 1/2	.7854,1667	16 8 1/2	.8354,1667	17 8 1/2	.8854,1667	18 8 1/2	.9354,1667	19 8 1/2	.9854,1667
15 8 3/4	.7864,5833	16 8 3/4	.8364,5833	17 8 3/4	.8864,5833	18 8 3/4	.9364,5833	19 8 3/4	.9864,5833
15 9	.7875	16 9	.8375	17 9	.8875	18 9	.9375	19 9	.9875
15 9 1/4	.7885,4167	16 9 1/4	.8385,4167	17 9 1/4	.8885,4167	18 9 1/4	.9385,4167	19 9 1/4	.9885,4167
15 9 1/2	.7895,8333	16 9 1/2	.8395,8333	17 9 1/2	.8895,8333	18 9 1/2	.9395,8333	19 9 1/2	.9895,8333
15 9 3/4	.7906,25	16 9 3/4	.8406,25	17 9 3/4	.8906,25	18 9 3/4	.9406,25	19 9 3/4	.9906,25
15 10	.7916,6667	16 10	.8416,6667	17 10	.8916,6667	18 10	.9416,6667	19 10	.9916,6667
15 10 1/4	.7927,0833	16 10 1/4	.8427,0833	17 10 1/4	.8927,0833	18 10 1/4	.9427,0833	19 10 1/4	.9927,0833
15 10 1/2	.7937,5	16 10 1/2	.8437,5	17 10 1/2	.8937,5	18 10 1/2	.9437,5	19 10 1/2	.9937,5
15 10 3/4	.7947,9167	16 10 3/4	.8447,9167	17 10 3/4	.8947,9167	18 10 3/4	.9447,9167	19 10 3/4	.9947,9167
15 11	.7958,3333	16 11	.8458,3333	17 11	.8958,3333	18 11	.9458,3333	19 11	.9958,3333
15 11 1/4	.7968,75	16 11 1/4	.8468,75	17 11 1/4	.8968,75	18 11 1/4	.9468,75	19 11 1/4	.9968,75
15 11 1/2	.7979,1667	16 11 1/2	.8479,1667	17 11 1/2	.8979,1667	18 11 1/2	.9479,1667	19 11 1/2	.9979,1667
15 11 3/4	.7989,5833	16 11 3/4	.8489,5833	17 11 3/4	.8989,5833	18 11 3/4	.9489,5833	19 11 3/4	.9989,5833
16	.8	17	.85	18	.9	19	.95	20	1.

Examples of the Use of the preceding Table.

WHAT Decimal Part of a Pound is 9 d. 1/2?  
 Look in the Table for 9 d. 1/2, and even with it you will find .0395,8333; which is the Decimal required.

What is the Value of this Decimal .7468,75 in Shillings, Pence, and Farthings?  
 Look in the Table for that Decimal, and even with it you will find 14 s. 11 d. 1/2; which answers the Question.

Note, If you cannot find in the Table the exact Decimal sought for, take that which is nearest to it, and you can never err above half a Farthing.

This Table of Reduction will likewise answer all Questions usually performed by the Rule of Practice: As for Example,

What will 2364 Ounces of Silver come to, at 5 s. 3 d. 1/2 per Ounce?  
 Look in the Table for 5 s. 3 d. 1/2; and even with it you will find .2656,25  
 Which multiplied by 2364.

The Product will be 627.9375

Answer, 627 l. 18 s. 9 d.

But if the Question had been, What 10, 100, 1000, or 10000 Ounces would come to? the Answer had been much easier.

For, if the Value of one Ounce is	.2656,25	or	00	5	3 1/2
Then, 10 Ounces will come to	2.6562,5		2	13	1 1/2
100	26.5625		26	11	3
1000	265.625		265	12	6
10000	2656.25		2656	5	0

Multiplication of Decimals by 10, 100, 1000, &c. being performed only by removing the Point of Distinction, as above; therefore Questions of that Kind may be answered, by looking upon the Table, without the Trouble of a Pen.

For which Reason, those who are not well acquainted with Decimal Fractions, should carefully look over this Table, till they perfectly well understand it, and thereby all the other Tables which follow: The Trouble will not be great; it will not be long in doing; but, when it is done, it will be very pleasant to tell by Sight, That a thousand Pence comes to 4 l. 3 s. 4 d. ten thousand Groats to 166 l. 13 s. 4 d. &c.

# OF SIMPLE INTEREST.

THE Annual Interest of any Sum of Money is found, by multiplying the Principal Sum by the hundredth Part of the Rate of Interest, the Product being the Answer.  
 If the Rate of Interest be 2 per Cent. the hundredth Part is .02 ; if 2½ per Cent. .025 ; if 3 per Cent. .03 ; if 3½ per Cent. .035, &c.

*Examples.*

What is the Interest of 75 l. for one Year, at 3 per Cent ?

$$\begin{array}{r} 75. \\ \cdot 03 \\ \hline 2.25 \end{array} \text{ Answer, 2 l. 5 s. 0 d.}$$

What is the Interest of 157 l. 17 s. 6 d. at 5 per Cent ?

$$\begin{array}{r} 157.875 \\ \cdot 05 \\ \hline 7.89375 \end{array} \text{ Answer, 7 l. 17 s. 10 d. } \frac{3}{4}$$

What is the Interest of 3635 l. at 4 per Cent ?

$$\begin{array}{r} 3635. \\ \cdot 04 \\ \hline 145.40 \end{array} \text{ Answer, 145 l. 8 s. 0 d.}$$

Thus the yearly Interest of any Sum is found by one Multiplication.

Daily Interest is found by dividing the Annual Interest by 365, the Quotient being the Answer.

Thus .05 being the Interest of one Pound for one Year at 5 per Cent. divided by 365, the Quotient will be, .0001,3698,6301, &c. which is the Interest of one Pound for one Day at the same Rate.

The Interest for one Day being thus found, that Interest multiplied by 2, 3, 4, 5, 6, &c. gives the Interest of one Pound for any Number of Days.

*Example,*

*Example, at the said Rate of 5 per Cent.*

The Interest of one Pound for one Day, is	_____	.0001,3699 *
Which multiplied by 2. gives the Interest for 2 Days	_____	.0002,7397
3. _____	3 _____	.0004,1096 *
4. _____	4 _____	.0005,4795 *
5. _____	5 _____	.0006,8493 *
6. _____	6 _____	.0008,2192 *
7. _____	7 _____	.0009,5890
8. _____	8 _____	.0010,9589
9. _____	9 _____	.0012,3288 *
10. _____	10 _____	.0013,6986
100. _____	100 _____	.0136,9863
		£c.

And thus the following Table of Simple Interest is made.

*Note,* That in contracting a Decimal Fraction, from many to fewer Places, it is proper to add one to the last Figure retained, if the next Figure omitted exceed 5. This is observed in all the following Tables, as it is above, where marked \*.

C

A Table



A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 7 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 1-50.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 7 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 1-50.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 7 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 51-100.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 7 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 51-100.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 101-150.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 101-150.



A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 151 to 200 days.

A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 151 to 200 days.

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with columns for Days (201-250) and interest rates (2, 2.5, 3, 3.5, 4, 4.5 per Cent.).

A Table of Simple Interest.

The Interest of One Pound for any Number of Days, &c.

Table with columns for Days (201-250) and interest rates (5, 6, 7, 8, 9, 10 per Cent.).

A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 251 to 300.

A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 251 to 300.



A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with columns for Days (301-350) and interest rates (At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent.).

A Table of Simple Interest. The Interest of One Pound for any Number of Days, &c.

Table with columns for Days (301-350) and interest rates (5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent.).

**A Table of Simple Interest.**  
The Interest of One Pound for any Number of Days, &c.

Days.	At 2 per Cent.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	Days.
351	.0192,3288	.0240,4110	.0288,4932	.0336,5753	.0384,6575	.0432,7397	351
352	.0192,8767	.0241,0959	.0289,3151	.0337,5342	.0385,7534	.0433,9726	352
353	.0193,4247	.0241,7808	.0290,1370	.0338,4932	.0386,8493	.0435,2055	353
354	.0193,9726	.0242,4658	.0290,9589	.0339,4521	.0387,9452	.0436,4384	354
355	.0194,5205	.0243,1507	.0291,7808	.0340,4110	.0389,0411	.0437,6712	355
356	.0195,0685	.0243,8356	.0292,6027	.0341,3699	.0390,1370	.0438,9041	356
357	.0195,6164	.0244,5205	.0293,4247	.0342,3288	.0391,2329	.0440,1370	357
358	.0196,1644	.0245,2055	.0294,2466	.0343,2877	.0392,3288	.0441,3699	358
359	.0196,7123	.0245,8904	.0295,0685	.0344,2466	.0393,4247	.0442,6027	359
360	.0197,2603	.0246,5753	.0295,8904	.0345,2055	.0394,5205	.0443,8356	360
361	.0197,8082	.0247,2603	.0296,7123	.0346,1644	.0395,6164	.0445,0685	361
362	.0198,3562	.0247,9452	.0297,5342	.0347,1233	.0396,7123	.0446,3014	362
363	.0198,9041	.0248,6301	.0298,3562	.0348,0822	.0397,8082	.0447,5342	363
364	.0199,4521	.0249,3151	.0299,1781	.0349,0411	.0398,9041	.0448,7671	364
365	.0200,0000	.0250,0000	.0300,0000	.0350,0000	.0400,0000	.0450,0000	365
Years.							Years.
1	.02	.025	.03	.035	.04	.045	1
2	.04	.05	.06	.07	.08	.09	2
3	.06	.075	.09	.105	.12	.135	3
4	.08	.1	.12	.14	.16	.18	4
5	.1	.125	.15	.175	.2	.225	5
6	.12	.15	.18	.21	.24	.27	6
7	.14	.175	.21	.245	.28	.315	7
8	.16	.2	.24	.28	.32	.36	8
9	.18	.225	.27	.315	.36	.405	9
10	.2	.25	.3	.35	.4	.45	10
11	.22	.275	.33	.385	.44	.495	11
12	.24	.3	.36	.42	.48	.54	12
13	.26	.325	.39	.455	.52	.585	13
14	.28	.35	.42	.49	.56	.63	14
15	.3	.375	.45	.525	.6	.675	15
16	.32	.4	.48	.56	.64	.72	16
17	.34	.425	.51	.595	.68	.765	17
18	.36	.45	.54	.63	.72	.81	18
19	.38	.475	.57	.665	.76	.855	19
20	.4	.5	.6	.7	.8	.9	20
21	.42	.525	.63	.735	.84	.945	21
22	.44	.55	.66	.77	.88	.99	22
23	.46	.575	.69	.805	.92	1.035	23
24	.48	.6	.72	.84	.96	1.08	24
25	.5	.625	.75	.875	1.	1.125	25

**A Table of Simple Interest.**  
The Interest of One Pound for any Number of Days, &c.

Days.	5 per Cent.	6 per Cent.	7 per Cent.	8 per Cent.	9 per Cent.	10 per Cent.	Days.
351	.0480,8219	.0576,9863	.0673,1507	.0769,3151	.0865,4795	.0961,6438	351
352	.0482,1918	.0578,6301	.0675,0685	.0771,5068	.0867,9452	.0964,3836	352
353	.0483,5616	.0580,2740	.0676,0863	.0773,6986	.0870,4110	.0967,1233	353
354	.0484,9315	.0581,9178	.0678,9041	.0775,8904	.0872,8767	.0969,8630	354
355	.0486,3014	.0583,5616	.0680,8219	.0778,0822	.0875,3425	.0972,6027	355
356	.0487,6712	.0585,2055	.0682,7397	.0780,2740	.0877,8082	.0975,3425	356
357	.0489,0411	.0586,8493	.0684,6575	.0782,4658	.0880,2740	.0978,0822	357
358	.0490,4110	.0588,4932	.0686,5753	.0784,6575	.0882,7397	.0980,8219	358
359	.0491,7808	.0590,1370	.0688,4932	.0786,8493	.0885,2055	.0983,5616	359
360	.0493,1507	.0591,7808	.0690,4110	.0789,0411	.0887,6712	.0986,3014	360
361	.0494,5205	.0593,4247	.0692,3288	.0791,2329	.0890,1370	.0989,0411	361
362	.0495,8904	.0595,0685	.0694,2466	.0793,4247	.0892,6027	.0991,7808	362
363	.0497,2603	.0596,7123	.0696,1644	.0795,6164	.0895,0685	.0994,5205	363
364	.0498,6301	.0598,3562	.0698,0822	.0797,8082	.0897,5342	.0997,2603	364
365	.0500,0000	.0600,0000	.0700,0000	.0800,0000	.0900,0000	.1000,0000	365
Years.							Years.
1	.05	.06	.07	.08	.09	.1	1
2	.1	.12	.14	.16	.18	.2	2
3	.15	.18	.21	.24	.27	.3	3
4	.2	.24	.28	.32	.36	.4	4
5	.25	.3	.35	.4	.45	.5	5
6	.3	.36	.42	.48	.54	.6	6
7	.35	.42	.49	.56	.63	.7	7
8	.4	.48	.56	.64	.72	.8	8
9	.45	.54	.63	.72	.81	.9	9
10	.5	.6	.7	.8	.9	1.	10
11	.55	.66	.77	.88	.99	1.1	11
12	.6	.72	.84	.96	1.08	1.2	12
13	.65	.78	.91	1.04	1.17	1.3	13
14	.7	.84	.98	1.12	1.26	1.4	14
15	.75	.9	1.05	1.2	1.35	1.5	15
16	.8	.96	1.12	1.28	1.44	1.6	16
17	.85	1.02	1.19	1.36	1.53	1.7	17
18	.9	1.08	1.26	1.44	1.62	1.8	18
19	.95	1.14	1.33	1.52	1.71	1.9	19
20	1.	1.2	1.4	1.6	1.8	2.	20
21	1.05	1.26	1.47	1.68	1.89	2.1	21
22	1.1	1.32	1.54	1.76	1.98	2.2	22
23	1.15	1.38	1.61	1.84	2.07	2.3	23
24	1.2	1.44	1.68	1.92	2.16	2.4	24
25	1.25	1.5	1.75	2.	2.25	2.5	25

The Use of the preceding Table.

When the Interest of any Sum of Money is required for any Number of Days, look in the Table for the Number of Days, and even with that Number, under the given Rate, will be found the Interest of one Pound, for that Time, and at that Rate; which Interest so found, being multiplied by the Principal Sum, the Product answers the Question.

Examples.

What is the Interest of 462 l. for 85 Days, at 5 per Cent. per Annum?  
 In the Table, even with 85 Days, and under 5 per Cent. I find the Interest of 1 l. to be .0116,4384.  
 Which multiplied by the Principal 462.

The Product will be 5.3794,5408

Answer, 5 l. 7 s. 7 d.

What is the Interest of 83 l. 13 s. 6 d. for 235 Days, at 4 per Cent. per Annum?  
 In the Table, even with 235 Days, and under 4 per Cent. I find the Interest of 1 l. to be .0257,5342.  
 Which multiplied by the Principal 83.675

The Product will be 2.1549, 86.

Answer, 2 l. 3 s. 1 d. 4.

What is the Interest of 2534 l. for 192 Days, at 4½ per Cent. per Annum?  
 In the Table, even with 192 Days, and under 4½ per Cent. I find the Interest of 1 l. to be .0236,7123.  
 Which multiplied by the Principal 2534.

The Product will be 59.9829, 86.

Answer, 59 l. 19 s. 8 d.

In like manner, the Interest of any Sum of Money for any Number of Days, is found by One Multiplication.

But if the Principal Sum for which the Interest is required, be 10 l. 100 l. 1000 l. &c. it may be found by Inspection only.

For, Suppose the Number of Days, and Rate of Interest, as in the last Question;

Then, As I see the Interest of 1 l. to be	.0236,7123, or	—	—	5½
So I likewise see	10 to be	2.367,123	—	4 8½
	100	23.671,23	2	7 4
	1,000	236.712,3	23	13 5
	10,000	2367.123,	236	14 3
	100,000	23671.23	2367	2 5½

Multiplication of Decimals, by 10. 100. 1000. &c. being performed only by removing the Point of Distinction, as hath been already said.

When the Interest of any Sum is required for any Number of Years and Days together, as it frequently happens upon paying off a Bond or Mortgage, add the Interest of One Pound for the Years at the End of the Table, to the Interest of One Pound for the odd Days; multiply that by the Principal Sum, and the Product will answer the Question.

For the more easy finding the Number of Days, from any one time given to any other, the following Table is made.

A Table

A Table of Days; Shewing

The Number of Days, from any Day in any One Month, to the same Day in any other Month, viz.

From	January.	February.	March.	April.	May.	June.
	February 31	March 28	April 31	May 30	June 31	July 30
	March 59	April 59	May 61	June 61	July 61	August 61
	April 90	May 89	June 92	July 91	August 92	September 92
	May 120	June 120	July 122	August 122	September 123	October 122
	June 151	July 150	August 153	September 153	October 153	November 153
To	July 181	August 181	September 184	October 183	November 184	December 183
	August 212	September 212	October 214	November 214	December 214	January 214
	September 243	October 242	November 245	December 244	January 245	February 245
	October 273	November 273	December 275	January 275	February 276	March 273
	November 304	December 303	January 306	February 306	March 304	April 304
	December 334	January 334	February 337	March 334	April 335	May 334
	January 365	February 365	March 365	April 365	May 365	June 365

  

From	July.	August.	September.	October.	November.	December.
	August 31	September 31	October 30	November 31	December 30	January 31
	September 62	October 61	November 61	December 61	January 61	February 62
	October 92	November 92	December 91	January 92	February 92	March 90
	November 123	December 122	January 122	February 123	March 120	April 121
	December 153	January 153	February 153	March 151	April 151	May 151
To	January 184	February 184	March 181	April 182	May 181	June 182
	February 215	March 212	April 212	May 212	June 212	July 212
	March 243	April 243	May 242	June 243	July 242	August 243
	April 274	May 273	June 273	July 273	August 273	September 274
	May 304	June 304	July 303	August 304	September 304	October 304
	June 335	July 334	August 334	September 335	October 334	November 335
	July 365	August 365	September 365	October 365	November 365	December 365

This Table shews the Number of Days, from any Day in any one Month, to the same Day in any other Month; As, from the 1st, 5th, 10th, or 20th of May, to the 1st, 5th, 10th, or 20th of November, is 184 Days: Which is thus known.

I find May at the Head of one of the Columns, and looking down that Column I find November, and even with it 184.

But, if the Question is from the 5th of May to the 10th of November, I must add 5, and the Number of Days will be 189: On the contrary, if it be demanded, from the 10th of May to the 5th of November, 5 must be subtracted, and the Number will be 179. And thus any Number of Days not exceeding a Year, are found by Inspection.

## OF DISCOUNT.

To find the Annual Discount of One Pound, at 2 per Cent. divide .02, by 1.02; at 2½ per Cent. divide .025, by 1.025; at 3 per Cent. .03, by 1.03; at 3½ per Cent. .035, by 1.035, &c. and the several Quotients will be the Discounts required.

And thus the Discount of One Pound for One Year is found, at the several Rates following, viz.

At 2 per Cent. the Discount is found to be	.0196,0784,3137
2½	.0243,9024,3902
3	.0291,2621,3592
3½	.0338,1642,5121
4	.0384,6153,8462
4½	.0430,6220,0957
5	.0476,1904,7619
6	.0566,0377,3585
7	.0654,2056,0748
8	.0740,7407,4074
9	.0825,6880,7339
10	.0909,0909,0909

The Discount of One Pound for One Year, being multiplied by any Principal Sum, the Product will be the Annual Discount of that Principal.

### Examples.

What is the Discount of 100 l. for One Year, at 5 per Cent?  
 The Discount of One Pound for One Year, at 5 per Cent. is .0476.19, &c.  
 Which multiplied by the Principal Sum 100.  
 The Product will be 4.7619, &c.

Answer, 4 l. 15 s. 2 d. ½.

So that he who allows 5 l. for the Discount of 100 l. for One Year, at 5 per Cent. (than which nothing is more common) wrongs himself; for he ought to receive so much Money, as at 5 per Cent. Interest, will amount to 100 l. in One Year, which less than 95 l. 4 s. 9 d. ½ will not do.

What is the Discount of 9342 l. at 4½ per Cent. for One Year?  
 The Discount of One Pound for One Year, at 4½ per Cent. is .0430.62, &c.  
 Which multiplied by the Principal Sum 9342.  
 The Product will be 402.2852, &c.

Answer, 402 l. 5 s. 8 d. ½.

Thus the Annual Discount of any Sum, is found by One Multiplication.

The

The Discount of One Pound for any Number of Days is thus found, viz.

First, find in the Table of Simple Interest, what is the Interest of One Pound, for any given Number of Days, at any given Rate: Then say, by the Rule of Three, as 1 l. and the Interest so found, is to 1 l. so is 1 l. to a 4th Number, the Arithmetical Complement of which said 4th Number will be the Discount of 1 l. for the same Number of Days, at the same Rate.

Or to express it otherwise; Divide Unity by 1 l. and the Interest thereof, and the Arithmetical Complement of the Quotient, will be the Discount required.

### Example at 5 per Cent.

I find 1 l. and the Interest thereof, for 1 Day to be 1.0001,3699  
 2 ————— 1.0002,7397  
 3 ————— 1.0004,1096  
 4 ————— 1.0005,4795  
 5 ————— 1.0006,8493  
 &c.

Then, Divide Unity, by	1.0001,3699	} and the Quotient will be	.9998,6303	} the Arithmetical Complement of which is	.0001,3697	} and is the Discount of one Pound for	1 Day
	1.0002,7397		.9997,2610		.0002,7390		2
	1.0004,1096		.9995,8921		.0004,1079		3
	1.0005,4795		.9994,5235		.0005,4765		4
	1.0006,8493		.9993,1554		.0006,8446		5
	1.0008,2192		.9991,7876		.0008,2124		6
	1.0009,5890		.9990,4202		.0009,5798		7
	1.0010,9589		.9989,0531		.0010,9469		8
	1.0012,3288		.9987,6864		.0012,3136		9
	1.0013,6986		.9986,3201		.0013,6799		10
	1.0136,9863		.9864,8649		.0135,1351		100
	1.0273,9726		.9733,3333		.0266,6667		200
							&c.

And thus the following Table of Discount is made.

A Table

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 1-50.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 1-50.



A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 51-100.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 51-100.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows 101-150.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 7 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows 101-150.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 7 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 151 to 200.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 7 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 151 to 200.



A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 201 to 250.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 201 to 250.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 251 to 300.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 8 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 251 to 300.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 7 columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 301 to 350.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Table with 7 columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 301 to 350.

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Days.	At 2 per Cent.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	Days.
351	.0188,6995	.0234,7669	.0280,4037	.0325,6159	.0370,4095	.0414,7901	351
352	.0189,2270	.0235,4200	.0281,1801	.0326,5133	.0371,4255	.0415,9227	352
353	.0189,7543	.0236,0730	.0281,9564	.0327,4105	.0372,4414	.0417,0550	353
354	.0190,2817	.0236,7259	.0282,7325	.0328,3076	.0373,4571	.0418,1871	354
355	.0190,8089	.0237,3788	.0283,5086	.0329,2045	.0374,4726	.0419,3189	355
356	.0191,3361	.0238,0316	.0284,2845	.0330,1012	.0375,4878	.0420,4504	356
357	.0191,8633	.0238,6842	.0285,0603	.0330,9977	.0376,5028	.0421,5816	357
358	.0192,3904	.0239,3368	.0285,8359	.0331,8941	.0377,5177	.0422,7126	358
359	.0192,9174	.0239,9893	.0286,6115	.0332,7904	.0378,5323	.0423,8433	359
360	.0193,4444	.0240,6417	.0287,3869	.0333,6864	.0379,5466	.0424,9738	360
361	.0193,9713	.0241,2940	.0288,1622	.0334,5823	.0380,5608	.0426,1040	361
362	.0194,4982	.0241,9463	.0288,9374	.0335,4781	.0381,5748	.0427,2339	362
363	.0195,0250	.0242,5984	.0289,7124	.0336,3736	.0382,5885	.0428,3635	363
364	.0195,5517	.0243,2505	.0290,4873	.0337,2690	.0383,6021	.0429,4929	364
365	.0196,0784	.0243,9024	.0291,2621	.0338,1643	.0384,6154	.0430,6220	365

A Table of Discount.

The Discount of One Pound for any Number of Days, &c.

Days.	5 per Cent.	6 per Cent.	7 per Cent.	8 per Cent.	9 per Cent.	10 per Cent.	Days.
351	.0458,7636	.0545,5111	.0630,6954	.0714,3584	.0796,5405	.0877,2807	351
352	.0460,0104	.0546,9802	.0632,3786	.0716,2478	.0798,6286	.0879,5602	352
353	.0461,2570	.0548,4489	.0634,0612	.0718,1365	.0800,7158	.0881,8386	353
354	.0462,5033	.0549,9171	.0635,7432	.0720,0244	.0802,8020	.0884,1159	354
355	.0463,7492	.0551,3849	.0637,4246	.0721,9115	.0804,8873	.0886,3920	355
356	.0464,9948	.0552,8523	.0639,1054	.0723,7979	.0806,9716	.0888,6670	356
357	.0466,2400	.0554,3191	.0640,7856	.0725,6835	.0809,0550	.0890,9408	357
358	.0467,4850	.0555,7855	.0642,4652	.0727,5683	.0811,1374	.0893,2136	358
359	.0468,7296	.0557,2515	.0644,1442	.0729,4524	.0813,2189	.0895,4851	359
360	.0469,9739	.0558,7170	.0645,8226	.0731,3357	.0815,2994	.0897,7556	360
361	.0471,2178	.0560,1821	.0647,5004	.0733,2182	.0817,3791	.0900,0249	361
362	.0472,4615	.0561,6467	.0649,1776	.0735,1000	.0819,4577	.0902,2931	362
363	.0473,7048	.0563,1108	.0650,8542	.0736,9810	.0821,5354	.0904,5602	363
364	.0474,9478	.0564,5745	.0652,5302	.0738,8613	.0823,6122	.0906,8261	364
365	.0476,1905	.0566,0377	.0654,2056	.0740,7407	.0825,6881	.0909,0909	365



The Use of the preceding Table.

When the Discount of any Sum of Money is required for any Number of Days, look in the Table for the Number of Days, and even with that Number, under the given Rate, will be found the Discount of One Pound for that Time; which Discount so found, being multiplied by the Principal Sum, the Product answers the Question.

Examples.

What is the Discount of 462 l. for 85 Days at 5 per Cent. per Annum?  
 In the Table, even with 85 Days, and under 5 per Cent. I find the Discount of 1 l. to be .0115,0982  
 Which multiplied by the Principal 462.

The Product will be 5.3175,3684

Answer, 5 l. 6 s. 4 d.  $\frac{1}{4}$ .

What is the Discount of 83 l. 13 s. 6 d. for 235 Days, at 4 per Cent. per Annum?  
 In the Table, even with 235 Days, and under 4 per Cent. I find the Discount of 1 l. to be .0251,0684  
 Which multiplied by the Principal 83.675

The Product will be 2.1008, £c.

Answer, 2 l. 2 s. 0 d.  $\frac{1}{4}$ .

What is the Discount of 2534 l. for 192 Days, at 4  $\frac{1}{2}$  per Cent. per Annum?  
 In the Table, even with 192 Days, and under 4  $\frac{1}{2}$  per Cent. I find the Discount of 1 l. to be .0231,2386  
 Which multiplied by the Principal 2534.

The Product will be 58.5958, £c.

Answer, 58 l. 11 s. 11 d.

In like manner, the Discount of any Sum of Money, for any Number of Days, is found by One Multiplication.

But if the Principal Sum for which the Discount is required, be 10 l. 100 l. 1000 l. £c. it may be found by Inspection only.

For, Suppose the Number of Days, and Rate as in the last Question.

	l.	s.	d.
Then, As I see the Discount of 1 l. to be .0231,2386, or	—	—	5 $\frac{1}{2}$
So I likewise see 10 to be .2312,386	—	—	4 7 $\frac{1}{2}$
100 — 2.3123,86	2	6	3
1,000 — 23.1238,6	23	2	5 $\frac{1}{2}$
10,000 — 231.2386	231	4	9 $\frac{1}{2}$
100,000 — 2312.386	2312	7	8 $\frac{1}{2}$

£c.

Of

OF COMPOUND INTEREST.

CASES in Compound Interest, if for any considerable Number of Years, being answered with great Difficulty, especially by those who are Strangers to Algebra, and the Use of the Logarithms, by reason of the continued Multiplications or Divisions, which in many Cases must be performed: Therefore the Five following Tables were calculated, by which all Questions relating to Compound Interest may be answered with Ease, provided the Rate of Interest, either given or sought for, be any of the several Rates of Interest, mentioned at the Head of the Tables, and that the Time given or sought for, be any of those Times for which the said Tables are made.

I shall shew my Reader how these Tables were constructed, then give him the Tables themselves, and afterwards give Solutions to all the Cases I have ever met with in Compound Interest.

The First Table shews the Amount of One Pound in any Number of Years, &c. and is made by the continued Multiplication of the Amount in Half a Year, and in One Year, by 1.02, if the Rate of Interest be 2 per Cent. by 1.025, if 2  $\frac{1}{2}$  per Cent. by 1.03, if 3 per Cent. by 1.05, if 5 per Cent. &c.

Example, at 5 per Cent.

The Amount of One Pound in	$\left. \begin{array}{l} 1 \frac{1}{2} \text{ a Year} \\ 1 \\ 1 \frac{1}{2} \\ 2 \\ 2 \frac{1}{2} \\ 3 \\ 3 \frac{1}{2} \\ 4 \end{array} \right\}$	$\left. \begin{array}{l} 1.0246,9508 \\ 1.05 \\ 1.0759,2983 \\ 1.1025, \\ 1.1297,2632 \\ 1.1576,25 \\ 1.1862,1264 \\ 1.1576,25 \\ 1.1862,1264 \\ 1.2155,0625 \\ 1.2455,2327 \\ 1.2762,8156 \end{array} \right\}$	multiplied by 1.05, the Amount will be	$\left. \begin{array}{l} 1.0759,2983 \\ 1.1025, \\ 1.1297,2632 \\ 1.1576,25 \\ 1.1862,1264 \\ 1.2155,0625 \\ 1.2455,2327 \\ 1.2762,8156 \end{array} \right\}$	at the End of	$\left. \begin{array}{l} 1 \frac{1}{2} \text{ Year.} \\ 2 \\ 2 \frac{1}{2} \\ 3 \\ 3 \frac{1}{2} \\ 4 \\ 4 \frac{1}{2} \\ 5, \text{ \&c.} \end{array} \right\}$
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Note, The Amount of One Pound in Half a Year, is known by extracting the Square Root of the Amount of One Pound in One Year, at any given Rate; which Root when found, will be the Amount in Half a Year at the same Rate: So, in the foregoing Example, the Square Root of 1.05 is found to be 1.0246,9508, and is the Amount of One Pound in Half a Year at 5 per Cent.

Being multiplied by 1.0246,9508 the Amount in  $\frac{1}{2}$  a Year, as above,  
 The Product will be 1.0500,0000 the Amount in 1 Year.  
 Which multiplied by 1.0246,9508  
 The Product will be 1.0759,2983 the Amount in 1  $\frac{1}{2}$  Year.  
 Which multiplied by 1.0246,9508  
 The Product will be 1.1025,0000 the Amount in 2 Years.  
 £c.

And this is another way of making the First Table.

It



It may not be improper in this Place to observe, That as Compound Interest is a Series of Geometrical Proportions, and the Ratio given, being always so much per Cent. per Annum; the Interest or Amount therefore, of any Sum of Money, for any time less than a Year, will not come to so much at Compound, as it doth at Simple Interest.

For if 100 l. at Compound Interest, were to amount to 102 l. 10 s. in half a Year, then the Ratio would not be at 5 per Cent. but at 5 l. 1 s. 3 d. per Cent. per Annum; and if 100 l. were to amount to 101 l. 5 s. in a Quarter of a Year, then the Ratio would be very near 5 l. 1 s. 10 d. per Cent. per Annum.

As the First Table is the Foundation of all the other Tables of Compound Interest, and being like the rest, calculated only for every half Year; and as Questions may be put, for knowing the Amount in a less time, than half a Year, I have by way of Supplement, added a Table to shew the Amount of One Pound at Compound Interest, for any Number of Days; which the Reader will find, after I have shewn the Use of the other Tables.

That Table is made by the continual Multiplication of the Amount of One Pound in One Day into it self, &c. as may be seen by the following Example, at 5 per Cent.

Multiplied by	1.0001,3368	being the Amount in 1 Day,
	1.0001,3368	
The Product will be	1.0002,6738	the Amount in 2 Days.
Which multiplied by	1.0001,3368	
The Product will be	1.0004,0110	the Amount in 3 Days.
Which multiplied by	1.0001,3368	
The Product will be	1.0005,3483	the Amount in 4 Days.
Which multiplied by	1.0001,3368	
The Product will be	1.0006,6858	the Amount in 5 Days, &c.

I have likewise added two other Tables, one for reducing any Number of Days to the Decimal Parts of a Year, the other a Table of Geometrical Progression, the Uses of which will be mentioned in their proper Places.

The

The Second Table shews the Present Value of One Pound, &c. and may be made after this manner. Find the Amount of One Pound in the First Table, at any given Rate, and for any given Time; then divide Unity by the Amount so found, and the Quotient will be the Present Value of One Pound, at the same Rate, for the same Time.

Example, at 5 per Cent.

Unity, or 1. divided by the several Amounts in the First Table, viz. by—	The Quotient will be	1.0246,9508	And is the Present Value of One Pound for	1/2 a Year
		1.05		1
		1.0759,2983		1 1/2
		1.1025		2
		1.1297,2632		2 1/2
		1.1576,25		3
		1.1862,1264		3 1/2
		1.2155,0625		4
		1.2455,2327		4 1/2
		1.2762,8156		5 Years, &c.
		.9759,0007		
		.9523,8095		
		.9294,2864		
		.9070,2948		
		.8851,7013		
		.8638,3760		
		.8430,1918		
		.8227,0247		
		.8028,7540		
		.7835,2616		

The Third Table shews the Amount of One Pound per Annum, &c. and is easily made from the First Table, thus: To 1 l. being the first Year of the Third Table, add the first Year of the First Table, the Amount will be the second Year of the Third Table; to which add the second Year of the First Table, the Amount will be the third Year of the Third Table, &c.

Example, at 5 per Cent.

Years of the First Table to be added;	1	1.	Years of the Third Table, &c.
	1	1.05	
	2	2.05	
	2	1.1025	
	3	3.1525	
	3	1.1576,25	
	4	4.3101,25	
	4	1.2155,0625	
	5	5.5256,3125	
	5	1.2762,8156	
1/2	.4939,0154	1/2	
1/2	1.0246,9508		
1 1/2	1.5185,9662	1 1/2	
1 1/2	1.0759,2983		
2 1/2	2.5945,2645	2 1/2	
2 1/2	1.1297,2632		
3 1/2	3.7242,5277	3 1/2	
3 1/2	1.1862,1264		
4 1/2	4.9104,6541	4 1/2	

Note, The Amount of One Pound per Annum in half a Year, is found, by dividing the Interest of One Pound for half a Year at any given Rate, by the hundredth part of that Rate, the Quotient being

being the Amount of One Pound *per Annum* in half a Year at the same Rate; So .0246,9508, the Interest of One Pound for half a Year, at 5 *per Cent.* divided by .05, the Quotient will be .4939,0154, the Amount of One Pound *per Annum*, in half a Year, at the same Rate.

The *Fourth Table* shews the Present Value of One Pound *per Annum*, &c. and is easily made from the second Table; thus,

The Present Value of the first Year in the Second Table, is the same in the Fourth Table, the first and second Years in the Second Table added together, make the second Year in the Fourth Table; the third Year in the Second Table, added to the second Year in the Fourth Table, make the third Year in the Fourth, &c.

Example, at 5 per Cent.

1	— .9523,8095 —	1.
2	— .9070,2948 —	
	1.8594,1043 —	2.
3	— .8638,3760 —	
	2.7232,4803 —	3.
4	— .8227,0247 —	
	3.5459,5050 —	4.
5	— .7835,2616 —	
	4.3294,7666 —	5.
Years in the Second Table; } Years in the Fourth Table, &c.		
1½	— .4819,9854 —	1½
2½	— .9294,2864 —	
	1.4114,2718 —	1½
3½	— .8851,7013 —	
	2.2965,9731 —	2½
4½	— .8430,1918 —	
	3.1396,1649 —	3½
5½	— .8028,7540 —	
	3.9424,9189 —	4½

Note, The Present Value of One Pound *per Annum* for half a Year is thus found.

Multiply the Amount of One Pound *per Annum* for half a Year, in the Third Table— .4939,0154  
By the Present Value of One Pound for half a Year, in the Second Table— .9759,0007

The Product will be the Present Value of One Pound *per Annum* for half a Year, } .4819,9854  
in the Fourth Table, as above

The

The *Fifth Table* shews the Annuity which One Pound will purchase, &c. and is made in this manner. Find the Present Value of One Pound *per Annum* in the Fourth Table, at any given Rate, and for any given Time; then divide Unity by the Present Value so found, and the Quotient will be the Annuity which One Pound will purchase at the same Rate, for the same Time.

Example, at 5 per Cent.

The Present Value of One Pound <i>per Ann.</i> for	1 Year, is .9523,8095	By which divide 1 or Unity, the Quotient will be	1.05	And is the Annuity which 1 L. will purchase for	1 Year
	1½ — 1.4114,2718		.7085,0272		1½
	2 — 1.8594,1043		.5378,0488		2
	2½ — 2.2965,9731		.4354,2679		2½
	3 — 2.7232,4803		.3672,0856		3
3½ — 3.1396,1649	.3185,1024	3½			
4 — 3.5459,5050	.2820,1183	4			
4½ — 3.9424,9190	.2536,4668	4½			
5 — 4.3294,7667	.2309,7480	5 &c.			

The Reader is desired to take Notice, that *Principal* and *Present Value* are Terms of the same Signification; and therefore by *Present Value* in the Second Table, is to be understood, a certain Principal Sum of which One Pound is the Amount, at the Rate and in the Time given; and that by *Present Value* in the Fourth Table is to be understood, such a Principal Sum as will purchase an Annuity of One Pound *per Annum* at the Rate, and for the Time given.

Altho these Tables seem to be calculated only to answer such Cases as relate to *Sterling Money*, yet they are of equal Use in Calculations relating to any other Species of Money whatever; and therefore if a Question is put, to know the Amount, Present Value, &c. of any Principal Sum, or of any Annuity, in Crowns, Guilders, Florins, Livres, &c. the Answer will be the same as if the Question had been put in Pounds *Sterling*; only observing that the Fraction, if any, will not be the Decimal Part of a Pound, but the Decimal Part of that particular Species mentioned in the Question.

H 2

The

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 1 to 25 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 1 to 25 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 25 1/2 to 50 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 25 1/2 to 50 years.



The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 50 1/2 to 75 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 50 1/2 to 75 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 75 1/2 to 100 years.

The First Table of Compound Interest. The Amount of One Pound in any Number of Years, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 75 1/2 to 100 years.

The Second Table of Compound Interest.

The Present Value of One Pound payable at the End of any Number of Years, &c.

Table with 7 columns: Years (1/2 to 25), At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years (1/2 to 25). Values range from .9901 to .6095.

0441

The Second Table of Compound Interest.

The Present Value of One Pound payable at the End of any Number of Years, &c.

Table with 7 columns: Years (1/2 to 25), 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years (1/2 to 25). Values range from .9759 to .2953.



The Second Table of Compound Interest.

The Present Value of One Pound payable at the End of any Number of Years, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 25 1/2 to 50 years.

The Second Table of Compound Interest.

The Present Value of One Pound, payable at the End of any Number of Years, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 25 1/2 to 50 years.



The Second Table of Compound Interest.

The Present Value of One Pound, payable at the End of any Number of Years, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 50 1/2 to 75 years.

The Second Table of Compound Interest.

The Present Value of One Pound, payable at the End of any Number of Years, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 50 1/2 to 75 years.

The Second Table of Compound Interest.

The Present Value of One Pound, payable at the End of any Number of Years, &c.

Table with 8 columns: Years (75 to 100), At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years (75 to 100). Rows show present values for each year and interest rate.

The Second Table of Compound Interest.

The Present Value of One Pound, payable at the End of any Number of Years, &c.

Table with 7 columns: Years (75 to 100), 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years (75 to 100). Rows show present values for each year and interest rate.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years (1 to 25), 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., and Years (1 to 25). Values represent the amount of one pound per annum at various interest rates over time.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years (1 to 25), 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., and Years (1 to 25). Values represent the amount of one pound per annum at various interest rates over time.



The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 25 1/2 to 50 years.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 25 1/2 to 50 years.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 50 1/2 to 75 years.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 50 1/2 to 75 years.



The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 75 1/2 to 100 years.

The Third Table of Compound Interest. The Amount of One Pound per Annum in any Number of Years, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 75 1/2 to 100 years.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 7 columns: Years (1/2 to 25), 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., and Years (1/2 to 25). Values range from approximately 0.49 to 19.52.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 7 columns: Years (1/2 to 25), 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., and Years (1/2 to 25). Values range from approximately 0.47 to 14.09.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 25 1/2 to 50 years.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 7 columns: 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 25 1/2 to 50 years.



The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 50 1/2 to 75 years.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 50 1/2 to 75 years.



The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 75 1/2 to 100 years.

The Fourth Table of Compound Interest.

The Present Value of One Pound per Annum for any Number of Years to come, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 75 1/2 to 100 years.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., and Years. Rows range from 1 to 25 years.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., and Years. Rows range from 1 to 25 years.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 25 1/2 to 50 years.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 8 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 25 1/2 to 50 years.



The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 7 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 50 1/2 to 75 years.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 50 1/2 to 75 years.



The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 8 columns: Years, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Years. Rows range from 75 1/2 to 100.

The Fifth Table of Compound Interest.

The Annuity which One Pound will purchase for any Number of Years to come, &c.

Table with 7 columns: Years, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Years. Rows range from 75 1/2 to 100.

*The Use of the preceding Tables.*

The *Amount*, or *present Value of any Sum of Money*, for any Number of Years not exceeding One hundred, at any of the aforesaid Rates of Interest, is thus found:

Look in the First or Second Table for the given Number of Years, and even with that Number, under the given Rate of Interest, is the Amount or Present Value of One Pound; which Amount or Present Value so found, being multiplied by any given Principal Sum, the Product will be the Amount or Present Value required.

After the same manner, the *Amount*, or *present Value of any Annuity*, or yearly Payment is found, by the Third or Fourth Table.

And the *Annuity which any Sum of Money will purchase*, by the Fifth Table.

So that most useful Questions in Compound Interest, are answered by One Multiplication.

But, as there are a great Variety of Cases relating to Compound Interest, some of which are more curious than useful, I shall proceed by way of *Problem*, to state all the Cases I can remember ever to have met with, and shew how they may be resolved by these Tables.

**PROBLEM I.** Any *Principal*, *Rate* and *Time* being given, to find the *Amount*.

*The Rule.* Find in the First Table the Amount of 1 *l.* at the Rate and for the Time given; which being multiplied by the Principal, the Product answers the Question.

*Example.* What will 523 *l.* amount to in 15 Years, at the Rate of 5 *l. per Cent. per Annum*?  
The Amount of 1 *l.* in 15 Years at 5 *per Cent.* is found in the First Table to be 2.0789, &c. which being multiplied by 523. the Product will be 1087.2794, &c.

*Answer*, 1087 *l.* 5 *s.* 7 *d.*

**PROBLEM II.** Any *Principal*, *Rate* and *Amount* being given, to find the *Time*.

*The Rule.* Divide the Amount by the Principal, and the Quotient will be the Amount of 1 *l.* at the given Rate; which look for in the First Table under that Rate, and it will be found even with the Time required.

*Example.* In what Time will 523 *l.* amount to 1087 *l.* 5 *s.* 7 *d.* at the Rate of 5 *l. per Cent. per Annum*?  
Divide 1087.2794, &c. by 523. the Quotient will be 2.0789, &c. which under 5 *per Cent.* in the First Table, is found to be even with 15 Years, and answers the Question.

PROBLEM

**PROBLEM III.** Any *Principal*, *Time* and *Amount* being given, to find the *Rate*.

*The Rule.* Divide the Amount by the Principal, and the Quotient will be the Amount of 1 *l.* in the given Time; which look for in the First Table, even with that Time, and it will be found under the Rate required.

*Example.* At what Rate *per Cent. per Annum* will 523 *l.* amount to 1087 *l.* 5 *s.* 7 *d.* in 15 Years?  
Divide 1087.2794, &c. by 523. the Quotient will be 2.0789, &c. which, even with 15 Years in the First Table, is found to be under 5 *per Cent.* and answers the Question.

**PROBLEM IV.** Any *Amount*, *Rate* and *Time* being given, to find the *Principal*.

*The Rule.* Divide the Amount, by the Amount of 1 *l.* in the First Table, at the Rate and for the Time given, and the Quotient will be the Principal required.

*Example.* What Principal Sum will amount to 1087 *l.* 5 *s.* 7 *d.* in 15 Years, at the Rate of 5 *l. per Cent. per Annum*?  
Divide 1087.2794, &c. by 2.0789, &c. being the Amount of 1 *l.* at the Rate and in the Time given, the Quotient will be 523.

*Answer*, 523 *l.*

*Note.* This Question is easier answered, by the second Table, as you will find by *Problem* the 13<sup>th</sup>.

**PROBLEM V.** Any *Principal*, *Rate* and *Time* being given, to find the *Annuity*.

*The Rule.* Find in the Fifth Table, the Annuity which 1 *l.* will purchase, at the Rate, and for the Time given; multiply the Annuity so found by the Principal, and the Product will be the Annuity required.

*Example.* What Annuity to continue 15 Years, will 523 *l.* purchase, computing at the Rate of 5 *l. per Cent. per Annum*?  
The Annuity which 1 *l.* will purchase for 15 Years at 5 *per Cent.* is found in the Fifth Table to be .0963, &c. which multiplied by 523. the Product will be 50.3870, &c.

*Answer*, 50 *l.* 7 *s.* 9 *d.* *per Annum*.

If the Question had been, What Annuity to continue 15 Years, will pay off a Debt of 523 *l.* computing at the Rate of 5 *l. per Cent. per Annum*? the Answer had been the same.

**PROBLEM VI.** Any *Principal*, *Annuity* and *Rate* being given, to find the *Time*.

*The Rule.* Divide the Annuity by the Principal, and the Quotient will be the Annuity which 1 *l.* will purchase at the given Rate; which look for in the Fifth Table under that Rate, and it will be found even with the Time required.

*Example.* An Annuity of 50 *l.* 7 *s.* 9 *d.* is purchased with 523 *l.* at the Rate of 5 *l. per Cent. per Annum*; What Time ought that Annuity to continue?  
Divide 50.3870, &c. by 523. the Quotient will be .0963, &c. which under 5 *per Cent.* in the Fifth Table, is found to be even with 15 Years, and answers the Question.

If the Question had been, In what Time will an Annuity of 50 *l.* 7 *s.* 9 *d.* pay off a Debt of 523 *l.* computing at the Rate of 5 *per Cent. per Annum*? the Answer had been the same.

PROBLEM

**PROBLEM VII.** Any *Principal, Annuity* and *Time* being given, to find the *Rate*.  
*The Rule.* Divide the Annuity by the Principal, and the Quotient will be the Annuity which 1 l. will purchase for the given Time; which look for in the Fifth Table, even with that Time, and it will be found under the Rate required.  
*Example.* If an Annuity of 50 l. 7 s. 9 d. to continue 15 Years, is purchased with 523 l. What Rate of Interest *per Cent. per Annum* is made of the Purchase-Money?  
 Divide 50.3870, &c. by 523. the Quotient will be .0963, &c. which, even with 15 Years in the Fifth Table, is found to be under 5 *per Cent.* and answers the Question.

**PROBLEM VIII.** Any *Annuity, Rate* and *Time* being given, to find the *Principal*.  
*The Rule.* Divide the Annuity, by the Annuity which 1 l. will purchase in the Fifth Table, at the Rate and for the Time given, and the Quotient will be the Principal required.  
*Example.* What Principal Sum will purchase an Annuity of 50 l. 7 s. 9 d. to continue 15 Years, at the Rate of 5 l. *per Cent. per Annum*?  
 Divide 50.3870, &c. by .0963, &c. being the Annuity which 1 l. will purchase for the Time and at the Rate given, the Quotient will be 523.

*Answer, 523 l.*

*Note,* This Question is easier answered by the Fourth Table, thus: Multiply 50.3870, &c. the Annuity, by 10.3796, &c. the present Value of 1 l. *per Annum* in the Fourth Table, at the Rate and for the Time given, the Product will be 523.

**PROBLEM IX.** Any *Annuity, Rate* and *Time* being given, to find the *Amount*.  
*The Rule.* Find in the Third Table, the Amount of 1 l. *per Annum* at the Rate, and for the Time given; by which multiply the Annuity, and the Product will be the Amount required.  
*Example.* What will an Annuity of 50 l. 7 s. 9 d. being forborn 15 Years, amount unto at the Rate of 5 l. *per Cent. per Annum*?  
 The Amount of 1 l. *per Annum* in 15 Years at 5 *per Cent.* is found in the Third Table to be 21.5785, &c. which being multiplied by 50.3870, &c. the Product will be 1087.2794, &c.

*Answer, 1087 l. 5 s. 7 d.*

**PROBLEM X.** Any *Annuity, Rate* and *Amount* being given, to find the *Time*.  
*The Rule.* Divide the Amount by the Annuity, and the Quotient will be the Amount of 1 l. *per Annum* at the given Rate; which look for in the Third Table under that Rate, and it will be found even with the Time required.  
*Example.* In what Time will an Annuity of 50 l. 7 s. 9 d. amount to 1087 l. 5 s. 7 d. at the Rate of 5 l. *per Cent. per Annum*?  
 Divide 1087.2794, &c. by 50.3870, &c. the Quotient will be 21.5785, &c. which under 5 *per Cent.* in the Third Table, is found to be even with 15 Years, and answers the Question.

PROBLEM

**PROBLEM XI.** Any *Annuity, Time* and *Amount* being given, to find the *Rate*.  
*The Rule.* Divide the Amount by the Annuity, and the Quotient will be the Amount of 1 l. *per Annum* for the given Time; which look for in the Third Table even with the Time, and it will be found under the Rate required.  
*Example.* At what Rate *per Cent. per Annum* will an Annuity of 50 l. 7 s. 9 d. amount to 1087 l. 5 s. 7 d. in 15 Years?  
 Divide 1087.2794, &c. by 50.3870, &c. the Quotient will be 21.5785, &c. which, even with 15 Years in the Third Table, is found to be under 5 *per Cent.* and answers the Question.

**PROBLEM XII.** Any *Amount, Rate* and *Time* being given, to find the *Annuity*.  
*The Rule.* Divide the Amount, by the Amount of 1 l. *per Annum* in the Third Table, at the Rate, and for the Time given, and the Quotient will be the Annuity required.  
*Example.* What Annuity will amount to 1087 l. 5 s. 7 d. in 15 Years, at the Rate of 5 l. *per Cent. per Annum*?  
 Divide 1087.2794, &c. by 21.5785, &c. being the Amount of 1 l. *per Annum* in the Time, and at the Rate given; the Quotient will be 50.3870, &c.  
*Answer, 50 l. 7 s. 9 d.*

**PROBLEM XIII.** Any *Principal Sum in Reversion, Rate* and *Time* being given, to find the *Present Value*.  
*The Rule.* Find in the Second Table the Present Value of 1 l. at the Rate and for the Time given; which being multiplied by the Principal, the Product answers the Question.  
*Example.* What is the Present Value of 1087 l. 5 s. 7 d. payable at the end of 15 Years, at the Rate of 5 l. *per Cent. per Annum*?  
 The Present Value of 1 l. payable at the end of 15 Years, at 5 *per Cent.* is found in the Second Table to be .4810, &c. which being multiplied by 1087.2794, &c. the Product will be 523.

*Answer, 523 l.*

*Note,* This is the same with *Problem the 4th,* only the Question is put in different Terms, and the Answer given by a different Table.

**PROBLEM XIV.** Any *Annuity, Time in Reversion,* and *Rate* being given, to find the *Present Value*.  
*The Rule.* Find in the Fourth Table the Present Value of 1 l. *per Annum* at the given Rate, both for the Time in being, and the Time in being and Time in Reversion added together; subtract the one from the other, and multiply the Remainder by the Annuity, the Product answers the Question.  
*Example.* What is it worth in Present Money to add 14 Years to a Term of 7 Years in being, and thereby make up the Term 21 Years, the Annuity or Rent being 35 l. *per Annum,* computing at the Rate of 5 l. *per Cent. per Annum*?  
 The Present Value of 1 l. *per Annum* in the Fourth Table,

for 21 Years, is	12.8211,5271
for 7 Years, is	5.7863,7340

Remainder	7.0347,7931
Multiplied by	35.

The Product is 246.2172, &c.

*Answer, 246 l. 4 s. 4 d.*

PROBLEM

**PROBLEM XV.** Any Annuity, several Times in Reversion, and Rate being given, to find the several Present Values.

*The Rule.* Find the Present Value of 1 l. per Annum in the Fourth Table, at the given Rate, and for the several given Times; which being severally multiplied by the Annuity, the Products will be the several Present Values of that Annuity for those several Times: subtract the several Present Values the one from the other, and the several Remainders answer the Question.

*Example.* A. has a Term of 7 Years in an Estate of 35 l. per Annum; B. has a Term of 14 Years in the same Estate in Reversion, after the Expiration of the 7 Years; and C. has a further Term of 20 Years in Reversion after the 21 Years: It is required to know, What is the Present Value of the several Terms, computing at the Rate of 5 l. per Cent. per Annum?

	l.	s.	d.
The Present Value of 35 l. per Annum for 41 Years, will be found to be—	605	6	½
21	448	14	9½
7	202	10	5½
See Problem 8.			

Which being subtracted one from the other, it will appear,  
 That the Present Value of A's Term is—202 10 5½  
 B's ————— 246 4 4  
 C's ————— 156 11 3

Which answers the Question. 605 6 ½

**PROBLEM XVI.** Any Annuity in Fee Simple, and Rate being given, to find the Present Value.

*The Rule.* Find the Present Value of 1 l. per Annum in Fee Simple at the end of the Fourth Table at the given Rate; which multiplied by the Annuity, the Product answers the Question.

*Example.* What is the Value of an Estate of 35 l. per Annum in Fee Simple, computing at the Rate of 5 l. per Cent. per Annum?  
 The Present Value of 1 l. per Annum in Fee Simple, is found to be 20; which multiplied by 35, the Product will be 700.

Answer, 700 l.

**PROBLEM XVII.** Any Present Value, Time in Reversion, and Rate being given, to find the Annuity.

*The Rule.* Find by Problem the 1st, what the Present Value will amount to, in the Time preceding the Commencement of the Annuity; then find by Problem the 5th, what Annuity that Amount will purchase, which answers the Question.

*Example.* What Annuity to continue 14 Years, after the Expiration of 7 Years, will 246 l. 4 s. 4 d. purchase, computing at the Rate of 5 l. per Cent. per Annum?  
 By Problem the 1st, I find 246 l. 4 s. 4 d. will at that Rate in 7 Years, amount to 346 l. 9 s. 0 d. ½; and by Problem the 5th, I find that 346 l. 9 s. 0 d. ½ will at the same Rate, purchase an Annuity of 35 l. per Annum to continue 14 Years.

Answer, 35 l. per Annum.

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**PROBLEM XVIII.** Any Annuity in Reversion, Present Value, and Rate being given, to find the Time.

*The Rule.* Find the Amount of the Present Value as above, by Problem the 1st; then by Problem the 6th, find the Time the Annuity ought to continue.

*Example.* An Annuity of 35 l. per Annum to commence after the Expiration of 7 Years, is purchased with 246 l. 4 s. 4 d. What time ought that Annuity to continue, computing at the Rate of 5 l. per Cent. per Annum?  
 I find by Problem the 1st, that 246 l. 4 s. 4 d. will in 7 Years amount to 346 l. 9 s. 0 d. ½ as above; by which divide the Annuity, the Quotient will be .1010,2397, which in the Fifth Table under 5 per Cent. will be found even with 14 Years, as by Problem the 6th, and answers the Question.

**PROBLEM XIX.** Any Annuity in Reversion, Present Value, and Time being given, to find the Rate.

*The Rule.* Find the Amount of the Present Value as above, by Problem the 1st; then by Problem the 7th, find the Rate of Interest.

*Example.* An Annuity of 35 l. per Annum to continue 14 Years, after the Expiration of 7 Years, is purchased with 246 l. 4 s. 4 d. What Rate of Interest per Cent. per Annum is made of the Purchase Money?  
 I find by Problem the 1st, that 246 l. 4 s. 4 d. will in 7 Years amount to 346 l. 9 s. 0 d. ½ as above; by which divide the Annuity, the Quotient will be .1010,2397, which in the Fifth Table, even with 14 Years, will be found under 5 per Cent. as by Problem the 7th, and answers the Question.

**PROBLEM XX.** Any Principal, and Rate being given, to find the Annuity in Fee Simple.

*The Rule.* Divide the Principal, by the Present Value of 1 l. per Annum in Fee Simple, at the End of the Fourth Table, and the Quotient answers the Question.

*Example.* What Annuity in Fee Simple, will 700 l. purchase, at the Rate of 5 l. per Cent. per Annum?  
 700. the Principal, divided by 20. the Present Value of 1 l. per Annum in Fee Simple, the Quotient will be 35.

Answer, 35 l. per Annum.

**PROBLEM XXI.** Any Principal, Annuity, and Rate being given, to find the Amount.

*The Rule.* Find the Time by Problem the 6th. Then, having Principal, Annuity, Rate and Time, find the Amount, either by Problem the 1st, or 9th.

**PROBLEM XXII.** Any Principal, Annuity, and Time being given, to find the Amount.

*The Rule.* Find the Rate by Problem the 7th. Then having Principal, Annuity, Rate and Time, find the Amount as before, either by Problem the 1st, or 9th.

**PROBLEM XXIII.** Any Annuity, Amount, and Time being given, to find the Principal.

*The Rule.* Find the Rate by Problem the 11th. Then having Annuity, Amount, Rate and Time, find the Principal, either by Problem the 4th, or 8th.

O

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PROBLEM XXIV. Any Annuity, Amount, and Rate being given, to find the Principal. The Rule. Find the Time by Problem the 10th. Then having Annuity, Amount, Rate and Time, find the Principal as before, either by Problem the 4th, or 8th.

PROBLEM XXV. Any Amount, Principal, and Time being given, to find the Annuity. The Rule. Find the Rate by Problem the 3d. Then having Amount, Principal, Rate and Time, find the Annuity either by Problem the 5th, or 12th.

PROBLEM XXVI. Any Amount, Principal, and Rate being given, to find the Annuity. The Rule. Find the Time by Problem the 2d. Then having Amount, Principal, Rate and Time, find the Annuity as before, either by Problem the 5th, or 12th.

PROBLEM XXVII. Any Amount, Principal, and Annuity being given, to find the Time. The Rule. This is found, either by dividing the Amount by the Principal, as in Problem the 2d, or by dividing the Annuity by the Principal, as in Problem the 6th.

PROBLEM XXVIII. Any Amount, Principal, and Annuity being given, to find the Rate. The Rule. This is likewise found, either by dividing the Amount by the Principal, as in Problem the 3d, or by dividing the Annuity by the Principal, as in Problem the 7th.

These are all the Cases I can remember ever to have met with; if there are any other, I hope my Reader will be able, by these Tables, to answer them without any Difficulty.

In all these Tables I have carried the Decimal Fraction to Eight Places, tho Four or Five would have been sufficient to have answered most Questions: I was willing to make them as compleat as I could, and in particular that Millions might be computed by them with exactness; of which I shall give an Example by Problem the 5th.

What annual Sum is sufficient to pay off a Debt of 50 Millions in 30 Years, computing at the Rate of 4 l. per Cent. per Annum?

By the Fifth Table, the Annuity, which will discharge a Debt of 1 l. in 30 Years } .0578,3010 at 4 per Cent. is found to be } 50,000,000. Which being multiplied by \_\_\_\_\_ 2,891,505. The Product will be \_\_\_\_\_

Answer, 2,891,505 l. per Annum.

So that suppose the National Debt to be at this Time 50 Millions, and suppose the Interest paid 2 Millions per Annum, or 4 per Cent. then will a Sinking Fund of 891,505 l. per Annum clear the whole Debt in 30 Years.

Another

Another Example by Problem the 8th, in Proof of the foregoing.

What is the Present Value of 2,891,505 l. per Annum for 30 Years to come, at the Rate of 4 l. per Cent. per Annum?

By the 4th Table, 1 l. per Annum, 30 Years to come, at 4 per Cent. is found to } be worth } 17,2920,3330 Which being multiplied by \_\_\_\_\_ 2,891,505. The Product will be \_\_\_\_\_ 50,000,000. Answer, 50 Millions.

In like manner, it will be found, that a sinking Fund of 1,200,598 l. per Annum will pay off a Debt of 50 Millions, in 25 Years; That 1,679,087 l. 10 s. per Annum will do the same in 20 Years, &c.

Another Example, by Problem the 6th.

Suppose Ten Millions were borrowed at the Rate of 6 l. per Cent. per Annum. Then the Fund for payment of the Interest must be 600,000 l. per Annum. Suppose, after some time, by agreement, the Interest should be reduced to 4 l. per Cent. per Annum.

Qu. In what Time will the said Fund of 600,000 l. per Annum, pay off the said Debt of Ten Millions, after the Interest is so reduced?

The Annuity of 600,000 l. being divided by the Principal 10,000,000. the Quotient will be .0600,0000, which look for in the 5th Table under 4 per Cent. and you will find .0600,1298, which is very near what was looked for, even with 28 Years.

Answer, 28 Years, very near.

By the 4th Table, 1 l. per Annum 28 Years to come, at 4 per Cent. is found to be } worth } 16,6630,6322 Which being multiplied by the Annuity of \_\_\_\_\_ 600,000. The Product will be the exact Principal, which will be paid off in that Time— 9,997,838.—

Which wants about 2162 l. of the Ten Millions. And therefore, 2 Days more than the 28 Years, will be sufficient to overpay the whole Debt. This shews the great difference between paying a large, or a moderate Interest for Money, since by sinking only 2 per Cent. as you find by this Example, Ten Millions are paid off in 28 Years, which otherwise would have remained a Debt for ever.

Note, The greater the Rate of Interest, the sooner by such a Reduction will the Debt be paid off: For instance, reducing the Interest from 10 to 8 per Cent. will discharge a Debt in less than 21 Years; from 8 to 6 in less than 24 Years: Whereas if it be from 6 to 4, it will require something more than 28 Years, as above.

I have not given these Examples to instruct those Gentlemen whose Business it is to make Calculations of this Kind; for tho these Tables may be of Use to them, yet am I far from thinking they want any Directions from me how to apply them: my Intent was only, by these Examples, to let my Reader know the reason of my carrying the Decimal Fraction to so many Places.

Compound Interest is a Series of Geometrical Proportions, as was before observed; and therefore the Amount in any one Time given, being multiplied into it self, the Product will be the Amount in double that time; and the Amount of any two several times given, multiplied one into the other, the Product will be the Amount in those two several times added together.

This the Reader may easily prove: for if he multiplies the Amount of 1 l. in 50 Years, at any given Rate, into it self, he will find the Product to be the Amount of 1 l. in 100 Years at the same Rate; and that the Product will be the same, if he multiplies the Amount in 60, by the Amount in 40 Years, or the Amount in 80, by the Amount in 20 Years, &c.

So that if a Question should be put, for knowing the Amount of any Sum in any Number of Years, exceeding those to which these Tables are limited; Multiplication will very easily resolve it, let it be for ever so long a Time.

Example.

What will 1 l. amount unto in 1000 Years, at the Rate of 5 l. per Cent. per Annum? By the First Table, I find that 1 l. in 100 Years, at 5 per Cent. will amount to 131.5012,5784; but to avoid many Fractions, I will suppose the said Amount to be no more than 131 l. 10 s.

Then the Amount in 100 Years, as above	131.5
being multiplied into it self	131.5
The Product will be the Amount in 200 Years	17292.25
which being likewise multiplied into it self	17292.25
The Product will be the Amount in 400 Years	299,021910.0625
which being also multiplied into it self	299,021910. +
The Product will be the Amount in 800 Years	89414,102697,425838. +
which multiplied by the Amount in 200 Years, as above	17292.25
The Product will be the Amount in 1000 Years	1546,171017,369561,960192. +

And answers the Question.

I say it answers the Question, and so it doth, near enough the Truth, for any Use that I think can possibly be made of it: But the Decimal Fraction .0012,5784 being left out of the first Multiplication, and consequently the Amount of it in the other, has occasioned the Sum Total to be many Millions less than otherwise it would have been; for the true Amount of 1 l. in 1000 Years, at 5 per Cent. is, 1546,318921, &c.

The Present Value of 1 l. payable at the end of any Number of Years exceeding 100, may likewise be very easily found; but as the extending any of the Tables, excepting the First, can serve no manner of Purpose that I know of, I shall here conclude what I had to say of the Use of the preceding Tables.

Of

Of the ADDITIONAL TABLES,

THERE are three of these Tables, the First is to shew the Amount of One Pound in any Number of Days; how it was made, I have already shewn in Page 48. to which I refer.

The Next is a Table for reducing any Number of Days to the Decimal Parts of a Year, and is thus made; divide Unity by 365, and the Quotient will be .0027,3972,6027, &c. and is the Decimal Fraction for One Day: When One is found, that Decimal multiplied by 2. 3. 4. 5. &c. the several Products, will be the several Decimal Fractions that answer to any Number of Days in the Year.

The Last is a Table of Geometrical Progression, and is made by a continued Multiplication by 2, or doubling. After the Tables themselves, I shall shew the Use of them, but think proper before I proceed, to shew in what Time any Sum will double, at any given Rate.

At z	At Com. Interest.		At Sim. Interest.	
	Years	Dec. Parts.	Years	Dec. Parts.
2	35.0027,8878	50.		
2½	28.0710,3453	40.		
3	23.4497,7225	33.3333,3333		
3½	20.1487,9168	28.5714,2857		
4	17.0729,8769	25.		
4½	15.7473,0184	22.2222,2222		
5	14.2066,9908	20.		
6	11.8956,6105	16.6666,6667		
7	10.2447,6835	14.2857,1429		
8	9.0064,6834	12.5		
9	8.0432,3173	11.1111,1111		
10	7.2725,4090	10.		

} per Cent. One Pound, or any other Sum will double, in

1st.

1st. A Supplement to the First Table of Compound Interest. The Amount of One Pound in any Number of Days, &c.

Table with columns: Days, At 2 per Cent., 2 1/2 per Cent., 3 per Cent., 3 1/2 per Cent., 4 per Cent., 4 1/2 per Cent., Days. Rows range from 1 to 365 days.

1st. A Supplement to the First Table of Compound Interest. The Amount of One Pound in any Number of Days, &c.

Table with columns: Days, 5 per Cent., 6 per Cent., 7 per Cent., 8 per Cent., 9 per Cent., 10 per Cent., Days. Rows range from 1 to 365 days.

2d. Any Number of Days, reduced to the Decimal Parts of a Year.

Days	Decimal Parts.	Days	Decimal Parts.	Days	Decimal Parts.	Days	Decimal Parts.
1	.0027,3973	51	.1397,2603	101	.2767,1233	151	.4136,9863
2	.0054,7945	52	.1424,6575	102	.2794,5205	152	.4164,3836
3	.0082,1918	53	.1452,0548	103	.2821,9178	153	.4191,7808
4	.0109,5890	54	.1479,4521	104	.2849,3151	154	.4219,1781
5	.0136,9863	55	.1506,8493	105	.2876,7123	155	.4246,5753
6	.0164,3836	56	.1534,2466	106	.2904,1096	156	.4273,9726
7	.0191,7808	57	.1561,6438	107	.2931,5068	157	.4301,3699
8	.0219,1781	58	.1589,0411	108	.2958,9041	158	.4328,7671
9	.0246,5753	59	.1616,4384	109	.2986,3014	159	.4356,1644
10	.0273,9726	60	.1643,8356	110	.3013,6986	160	.4383,5616
11	.0301,3699	61	.1671,2329	111	.3041,0959	161	.4410,9589
12	.0328,7671	62	.1698,6301	112	.3068,4932	162	.4438,3562
13	.0356,1644	63	.1726,0274	113	.3095,8904	163	.4465,7534
14	.0383,5616	64	.1753,4247	114	.3123,2877	164	.4493,1507
15	.0410,9589	65	.1780,8219	115	.3150,6849	165	.4520,5479
16	.0438,3562	66	.1808,2192	116	.3178,0822	166	.4547,9452
17	.0465,7534	67	.1835,6164	117	.3205,4795	167	.4575,3425
18	.0493,1507	68	.1863,0137	118	.3232,8767	168	.4602,7397
19	.0520,5479	69	.1890,4110	119	.3260,2740	169	.4630,1370
20	.0547,9452	70	.1917,8082	120	.3287,6712	170	.4657,5342
21	.0575,3425	71	.1945,2055	121	.3315,0685	171	.4684,9315
22	.0602,7397	72	.1972,6027	122	.3342,4658	172	.4712,3288
23	.0630,1370	73	.2000,0000	123	.3369,8630	173	.4739,7260
24	.0657,5342	74	.2027,3973	124	.3397,2603	174	.4767,1233
25	.0684,9315	75	.2054,7945	125	.3424,6575	175	.4794,5205
26	.0712,3288	76	.2082,1918	126	.3452,0548	176	.4821,9178
27	.0739,7260	77	.2109,5890	127	.3479,4521	177	.4849,3151
28	.0767,1233	78	.2136,9863	128	.3506,8493	178	.4876,7123
29	.0794,5205	79	.2164,3836	129	.3534,2466	179	.4904,1096
30	.0821,9178	80	.2191,7808	130	.3561,6438	180	.4931,5068
31	.0849,3151	81	.2219,1781	131	.3589,0411	181	.4958,9041
32	.0876,7123	82	.2246,5753	132	.3616,4384	182	.4986,3014
33	.0904,1096	83	.2273,9726	133	.3643,8356	183	.5013,6986
34	.0931,5068	84	.2301,3699	134	.3671,2329	184	.5041,0959
35	.0958,9041	85	.2328,7671	135	.3698,6301	185	.5068,4932
36	.0986,3014	86	.2356,1644	136	.3726,0274	186	.5095,8904
37	.1013,6986	87	.2383,5616	137	.3753,4247	187	.5123,2877
38	.1041,0959	88	.2410,9589	138	.3780,8219	188	.5150,6849
39	.1068,4932	89	.2438,3562	139	.3808,2192	189	.5178,0822
40	.1095,8904	90	.2465,7534	140	.3835,6164	190	.5205,4795
41	.1123,2877	91	.2493,1507	141	.3863,0137	191	.5232,8767
42	.1150,6849	92	.2520,5479	142	.3890,4110	192	.5260,2740
43	.1178,0822	93	.2547,9452	143	.3917,8082	193	.5287,6712
44	.1205,4795	94	.2575,3425	144	.3945,2055	194	.5315,0685
45	.1232,8767	95	.2602,7397	145	.3972,6027	195	.5342,4658
46	.1260,2740	96	.2630,1370	146	.4000,0000	196	.5369,8630
47	.1287,6712	97	.2657,5342	147	.4027,3973	197	.5397,2603
48	.1315,0685	98	.2684,9315	148	.4054,7945	198	.5424,6575
49	.1342,4658	99	.2712,3288	149	.4082,1918	199	.5452,0548
50	.1369,8630	100	.2739,7260	150	.4109,5890	200	.5479,4521

2d. Any Number of Days, reduced to the Decimal Parts of a Year.

Days	Decimal Parts.	Days	Decimal Parts.	Days	Decimal Parts.	Days	Decimal Parts.
201	.5506,8493	251	.6876,7123	301	.8246,5753	351	.9616,4384
202	.5534,2466	252	.6904,1096	302	.8273,9726	352	.9643,8356
203	.5561,6438	253	.6931,5068	303	.8301,3699	353	.9671,2329
204	.5589,0411	254	.6958,9041	304	.8328,7671	354	.9698,6301
205	.5616,4384	255	.6986,3014	305	.8356,1644	355	.9726,0274
206	.5643,8356	256	.7013,6986	306	.8383,5616	356	.9753,4247
207	.5671,2329	257	.7041,0959	307	.8410,9589	357	.9780,8219
208	.5698,6301	258	.7068,4932	308	.8438,3562	358	.9808,2192
209	.5726,0274	259	.7095,8904	309	.8465,7534	359	.9835,6164
210	.5753,4247	260	.7123,2877	310	.8493,1507	360	.9863,0137
211	.5780,8219	261	.7150,6849	311	.8520,5479	361	.9890,4110
212	.5808,2192	262	.7178,0822	312	.8547,9452	362	.9917,8082
213	.5835,6164	263	.7205,4795	313	.8575,3425	363	.9945,2055
214	.5863,0137	264	.7232,8767	314	.8602,7397	364	.9972,6027
215	.5890,4110	265	.7260,2740	315	.8630,1370	365	i.
216	.5917,8082	266	.7287,6712	316	.8657,5342		
217	.5945,2055	267	.7315,0685	317	.8684,9315		
218	.5972,6027	268	.7342,4658	318	.8712,3288		
219	.6000,0000	269	.7369,8630	319	.8739,7260		
220	.6027,3973	270	.7397,2603	320	.8767,1233		
221	.6054,7945	271	.7424,6575	321	.8794,5205		
222	.6082,1918	272	.7452,0548	322	.8821,9178		
223	.6109,5890	273	.7479,4521	323	.8849,3151		
224	.6136,9863	274	.7506,8493	324	.8876,7123		
225	.6164,3836	275	.7534,2466	325	.8904,1096		
226	.6191,7808	276	.7561,6438	326	.8931,5068		
227	.6219,1781	277	.7589,0411	327	.8958,9041		
228	.6246,5753	278	.7616,4384	328	.8986,3014		
229	.6273,9726	279	.7643,8356	329	.9013,6986		
230	.6301,3699	280	.7671,2329	330	.9041,0959		
231	.6328,7671	281	.7698,6301	331	.9068,4932		
232	.6356,1644	282	.7726,0274	332	.9095,8904		
233	.6383,5616	283	.7753,4247	333	.9123,2877		
234	.6410,9589	284	.7780,8219	334	.9150,6849		
235	.6438,3562	285	.7808,2192	335	.9178,0822		
236	.6465,7534	286	.7835,6164	336	.9205,4795		
237	.6493,1507	287	.7863,0137	337	.9232,8767		
238	.6520,5479	288	.7890,4110	338	.9260,2740		
239	.6547,9452	289	.7917,8082	339	.9287,6712		
240	.6575,3425	290	.7945,2055	340	.9315,0685		
241	.6602,7397	291	.7972,6027	341	.9342,4658		
242	.6630,1370	292	.8000,0000	342	.9369,8630		
243	.6657,5342	293	.8027,3973	343	.9397,2603		
244	.6684,9315	294	.8054,7945	344	.9424,6575		
245	.6712,3288	295	.8082,1918	345	.9452,0548		
246	.6739,7260	296	.8109,5890	346	.9479,4521		
247	.6767,1233	297	.8136,9863	347	.9506,8493		
248	.6794,5205	298	.8164,3836	348	.9534,2466		
249	.6821,9178	299	.8191,7808	349	.9561,6438		
250	.6849,3151	300	.8219,1781	350	.9589,0411		



3d. A Table of Geometrical Progression, The Ratio being 2.

Table with 3 columns: Day/Number, Value, and Day/Number. Values range from 1 to 1125,899,906,842,624. Includes a 'Sum Total' at the bottom.

The Use of the Additional Tables.

When the Amount of any Sum of Money is required for any Number of Days at Compound Interest, look in the 1st of these Tables for the Number of Days, and even with that Number, under the given Rate, will be found the Amount of One Pound for that Time; which Amount so found, being multiplied by the Principal Sum, the Product answers the Question.

If the exact Number of Days sought for be not in the Table, take Two Numbers, which being added together will make the exact Number; multiply those two one into the other, and the Product will be the Amount of One Pound in the Time sought for.

Examples.

Qu. What will 523 l. amount to, in 194 Days, at the Rate of 5 l. per Cent. per Annum?

The Amount of 1 l. in 190 Days, at 5 per Cent. is found in the Table to be 1.0257,2289 Multiplied by the Amount of 1 l. in 4 Days, at the same Rate 1.0005,3483

The Product will be the Amount of 1 l. in 194 Days 1.0262,7148 Which being multiplied by the Principal 523.

The Product will be 536.7399,8404

Answer, 536 l. 14 s. 9 d. 1/2.

Qu. What will 523 l. amount to in 5 Years and 194 Days, at the Rate of 5 l. per Cent. per Annum?

The Amount of 1 l. in 5 Years, at 5 per Cent. by the First Table of Compound Interest 1.2762,8156 Multiplied by the Amount of 1 l. in 194 Days, as above 1.0262,7148

The Product will be the Amount of 1 l. in 5 Years and 194 Days 1.3098,1136 Which being multiplied by the Principal 523.

The Product will be 685.0313,4128

Answer, 685 l. 00 s. 7 d. 1/2.

And thus, if there should be any odd Days in any Question given, the same may be answered with very little Trouble.

The 2d of these Tables being only to shew, what Decimal Part of a Year answers to any Number of Days; or, what Number of Days is contained in any Decimal Part of a Year; the Use of it is so obvious, that there needs no Example to illustrate it.

The 3d and Last is the Table of Geometrical Progression, which is applicable to a great variety of Cases, some of them of real Use, but for the most part, only for Speculation or Amusement: I shall give some few Examples of the Use of this Table, and then leave my Reader at his Leisure to amuse himself with it, in other Matters that may occur to him.

Qu. 1. What will 1 l. amount to, in 1000 Years, at the Rate of 5 l. per Cent. per Annum?

You will find in Page 101. That 1 l. at 5 per Cent. Compound Interest, will double in 14 Years, and .2066,9908 Decimal Parts of a Year; therefore divide 1000. by 14.2066,9908, and you will have 70. for the Quotient, with a Remainder of 5,5310,6440: That is, 1 l. will double 70 times in 994 Years and about 171 Days, which wants 5 Years and almost 194 Days of 1000 Years, the time given in the Question.

It appears by the 3d of the additional Tables, that 1 l. doubled } 1180,591620,717411,303424.  
70 Times, amounts to \_\_\_\_\_  
Which being multiplied by the Amount of 1 l. in 5 Years and 194 Days \_\_\_\_\_ 1.3098,1136  
The Product will be \_\_\_\_\_ 1546,352316,336476,675017.

And Answers the Question.

I say, as I did in Page 100. that it answers, near enough the Truth for any Use; but as in that Answer it wanted, so in this it exceeds the true Amount: the Reason is, I have computed the remainder at 5 Years and 194 Days, whereas it really wants about 4 Hours of that time.

No doubt but it will appear surprizing to those who are unacquainted with Things of this Nature, That computing about 4 Hours too much, should make a difference in the Amount of 1 l. of greater Value than all the Money the whole World is worth! But, I believe what follows will greatly increase their Wonder.

Qu. 2. Suppose the Earth to be a perfect Globe, whose Diameter is in Miles \_\_\_\_\_ 8000.  
Let that be multiplied into it self \_\_\_\_\_ 8000.

And it will give in Square Miles \_\_\_\_\_ 64,000000.  
Which again multiplied by \_\_\_\_\_ 8000.

Will give the Cubick Miles, in a Cubick Body, whose Root is equal to } 512000,000000.  
the Diameter of the Earth \_\_\_\_\_  
Which being multiplied by the Proportion which a Globe bears to a Cube \_\_\_\_\_ 5235,9877,5598

The Product will be the Cubick Miles contained in the Globe of the Earth \_\_\_\_\_ 268082,573106.

The Length of a Mile is 1760 Yards, or in Inches \_\_\_\_\_ 63360.  
Which being multiplied into it self \_\_\_\_\_ 63360.

Gives the Square Inches in a Square Mile \_\_\_\_\_ 4014,489600.  
Which again multiplied by \_\_\_\_\_ 63360.

Gives the Cubick Inches in a Cubick Mile \_\_\_\_\_ 254,358061,056000.  
Which being multiplied by the Cubick Miles in the Globe \_\_\_\_\_ 268082,573106.

Gives the Cubick Inches contained in the Globe \_\_\_\_\_ 68,188963,498145,531559,936000.  
And if a Cubick Inch of fine Gold is supposed to be }  
worth 35 l. then the Cubick Inches in the Globe, } \_\_\_\_\_ 35.  
multiplied by \_\_\_\_\_

The Product will be, the Value of a solid Body }  
made of fine Gold, equal in Magnitude to the } 2386,613722,435093,604597,760000 l.  
whole Globe of the Earth \_\_\_\_\_

One

One Pound at 10 per Cent. Compound Interest doubles in 7 Years, and .2725,4090 Decimal Parts of a Year, consequently it will double 91 Times, in something less than 662 Years.

1 l. doubled 91 Times, amounts to \_\_\_\_\_ 2475,880078,570760,549798,248448 l.

Therefore, 1 l. at 10 per Cent. in 662 Years, will amount to more than a solid Body as big as the whole Globe of the Earth is worth, tho made of fine Gold!

Qu. 3. Suppose a Horse was to be sold, according to the Number of Nails in his Shoes, and that the Number was six in each Shoe, that the Price was to be a Farthing for the first Nail, an Halfpenny for the second, a Penny for the third, &c. still doubling for every Nail of the Twenty four; and that it was required to know, what the Horse would sell for?

It is plain in this Case there will be 23 doubles, and one more must be taken to know the Sum Total, which is always the double of the last Term, less Unity: So that this Question is easily answered, thus, Look in the 3d Table for the Number even with 24. and it will be found to be 16,777216. therefore the Price of the Horse will be 16,777215. Farthings, or 17476 l. 5 s. 3 d. 3/4.

4. Dr. Wallis mentions a Story, from *Alsephad* an Arabick Writer, of one *Sessa* an Indian, who having invented the Game at Chers, taught it to his Prince *Shebram*: The King, who was highly pleased with it, bid him ask what he would for the Reward of his Invention; whereupon he asked, that for the first little Square of the Chers-board, he might have one Grain of Wheat given him, for the second, two; and so on doubling continually, according to the Number of Squares in the Chers-board, which was 64. The King who intended to give him a very noble Reward, was much displeas'd that he had asked for trifling a one; but *Sessa* declared, that he should be very well contented with it. So the Reward he had desired, was ordered to be given him: But the King was quickly astonish'd, when he found it would rise to so vast a Quantity, that the whole Earth it self could not furnish so much Wheat.

What the Number of Grains is, may be found in the 3d Table, in like manner as in the foregoing Case; in this there are 63 doubles, therefore the Number in the Table, even with 64. less one, must be the Sum Total of all the Grains; which Number is 18,446744,073709,551615. Grains.

In the Statute intituled, *Affisa Panis & Cervisie*, made Anno 51. H. III. and Anno Dom. 1266. is the following Clause, viz.

“ By the Consent of the whole Realm of *England*, the Measure of Our Lord the King was made, “ That is to say, that an *English* Penny, called a *Sterling*, round and without any Clipping, shall weigh “ xxxii Wheat Corns in the midst of the Ear, and xx d. do make an Ounce, and xii Ounces one “ Pound, and eight Pound do make a Gallon of Wine, and eight Gallons of Wine do make a *London* “ Bushel, which is the eighth part of a Quarter.”

So that according to this Statute there should be 3,932160. Grains of Wheat in a Quarter; and if the Price of Wheat is reckoned at 20 s. the Quarter, then the Value of the Reward *Sessa* desired, is 4,691249,611844. Pounds Sterling.

WHEN one considers, to what an immense Sum a very small matter will amount, in a long Course of Years, there is no wonder to be made, That in *Popish* Countries, those Gentlemen who call themselves *the Church*, should have made such great Acquisitions; it is rather a surprize to me, that, like their Brethren the *Magi* of old, they have not usurped all Power over the Possessions as well as Consciences of the Lairy; since in all Probability it would have been attended with better Success as to the Continuance of it.

What

What they might have acquired in England before the Reformation, had it not been for the Statute of Mortmain, is not to be determined: but certainly it would have been very great; for notwithstanding that Statute, their Revenues increased from time to time, till the Reign of King Henry VIII. which was above Two hundred Years after the making of it.

In his Reign they suffered much, both with respect to their Power and Estates; as has been since greatly bewailed by many good Protestant Divines: But, if they will have Patience for a few Ages, they will find, that the late Queen Anne has furnished them with Materials sufficient, not only to repair the Dilapidations of King Henry VIII. but also to erect much more noble Structures than were demolished in that Reign.

The late Reverend and Learned Dr. Prideaux, Dean of Norwich, in his Vindication of an Award of King Charles I. Page 64. says, "The Queen's Majesty's late Bounty to the Church, hath laid a very good Foundation for the redeeming again of Impropriations to it, were this Bounty wholly appropriated thereto, and to a better Use I am positive to say it cannot be applied; and having the Honour to be one of the Commissioners for the disposal of this Bounty, I have the more Right to declare my Judgment herein. If it be distributed in Pensions, it will better only some single Persons, but leave the Church in the same State of deficiency for God's Service which it was in before. But if it be laid out for the buying in of Impropriations again to the Parish Churches from which they have been alienated, it is sufficient to buy in Twenty or Thirty of them every Year; and if thus Year by Year the Work be carried on, it will every Year help to deliver us from the greatest Mischiefs which the Church hath groaned under since the time of the Reformation, and in process of Time, will wholly remove it from us. And if the Forfeitures of all those Lands, and other Donations, which are given contrary to Law for the maintaining of Popish Priests here, and Popish Monasteries and Convents beyond Sea, were all taken by the Government, and assigned to the same Use, the whole Work would be soon done, and the Church again restored to that Competency of Revenue which is necessary for it. These Donations now in the Hands of the Popish Party for those superstitious and unlawful Ends, are computed by such as can guess best of the Matter, to amount in Value to at least a Million of Money. And it being by this Fund that they are enabled to carry on their dark and hellish Designs, whereby they are continually working for the subversion both of our Church and State, we can never be safe as to either, till it be wholly taken from them. And since they were the Popish Clergy that gave the Handle for this Alienation of Tythes, by their having first appropriated them to their Monasteries and Convents, I think this Wealth of theirs cannot be more properly employed, than for the remedying of the Evil which they have occasioned. And altho it were designed, like the Censers of Korah and his Company, for the offering up of false Incense unto the Lord, yet since it hath been consecrated to God's Altar, it is fittest that it should with them, for a better Use, be nailed thereto."

I have quoted this Learned Dean to shew that I am not singular in my Opinion; I could wish he had told us, what he thought the Commissioners for the disposal of this Bounty might do with the Revenue of Tenths and First Fruits, after they have bought in all the Impropriations, Abbey Lands, &c. for they are a Corporation, which are to have perpetual Succession, with full Capacity to purchase and receive, as well from Persons disposed to give, as from others willing to sell, without Licence, or Writ of Ad quod Damnum, the Statute of Mortmain, or any other Statute or Law to the contrary notwithstanding. Vide 2<sup>o</sup> & 3<sup>o</sup> Anne, cap. 11. §. 4.

And by Virtue of this Power they have already made many Purchases, and have received a great Number of Benefactions from private Persons, amongst which there was a Legacy left them by one Gentleman of the clear Value of Ten thousand Pounds; so that, as the Dean says, in Time the Church may be again restored to a Competency of Revenue.

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The Dean likewise says in the same Treatise, That Personal Tithes ought to be paid of the clear Profits gained by the Labour and Industry of Man, as by Merchandize, Handycraft-Trades, and all other Employments by which Men get their Livings; and to prove this he quotes St. Ambrose, St. Austin, and a great Number of other Authorities, all of them, I freely acknowledge, very full and clear in this Point: and adds, that every Man is guilty of the horrid Crime of Sacrilege, who detains from God and his Church, for the Maintenance of his Ministers, what he knows to be duly consecrated thereto; that is, the Tenth Part of the Profits of Trade, Labour, &c. Now if the Laity could be persuaded to be of Opinion with the Dean in this matter, the Clergy would be very well provided for in Cities, Trading Towns, and Parishes where Manufactures are established; many of them would then have vastly greater Incomes, than the Archbishops and Bishops themselves have now. It is true, he says the People and their Ministers may make such a Composition for these Personal Tithes, as shall hold good in Law, and bind their Successors to the Observance of it. But who can imagine, that such a Composition can discharge any Man from the Guilt of that horrid Crime of Sacrilege beforementioned?

In that curious Piece, The Connection of the History of the Old and New Testament, written by the same Dean Prideaux, there is a Relation of a most dreadful Destruction which befel the whole Army of Brennus the Gaul, only for designing to plunder the Temple of Delphos; upon which the Dean says, Thus was God pleased, in a very extraordinary manner, to execute his Vengeance upon those Sacrilegious Wretches. Certainly every one must agree, that compounding with, or in other Words, detaining from the Christian Priesthood any part of what is really their due, is a much greater Crime than intending to plunder a Pagan Temple; and therefore I think there can be no one who has any Sense of Religion, and believes the Clergy have such a Right, that would make any such Composition, notwithstanding it might hold good in Law, but on the contrary pay the utmost Farthing. For my Part I freely own, That I no more believe they have any such Right, than I believe that GOD destroyed Two hundred thousand Soldiers for intending to plunder.

That the Livings of the poor Clergy want Augmentation is most certain, some of them being so very mean, that they are hardly sufficient to buy the Incumbent Bread for himself, much less to maintain a Family; and therefore I heartily wish they were so augmented, as that all of them had competent Revenues to support them suitable to their Education and Character: And, if I knew any way to do it sooner than by the Manner the Corporation hath taken, I should as readily, and with as much Pleasure communicate it, as any Man alive. But yet at the same time I must take the Liberty, as an Englishman, to declare, that I do not like any Repeal of the Statute of Mortmain, upon any account whatever, nor settling a Revenue without Limitation, upon a Corporation that is to have perpetual Succession, and thereby would in Time be able to engross all the Estates in the Kingdom into their Hands. Not that I think any body should be very uneasy about it, since there is no doubt but Posterity will put a stop to their Proceedings, whenever they apprehend any Danger from them.

There is another thing I shall likewise take the Liberty of saying I do not like, and that is, the settling a certain annual Sum of Money in lieu of Tithes, upon the several Parsons, Vicars and Curates, in the Parishes of the City of London, which were burnt by the late dreadful Fire; this was done by an Act passed Anno 22<sup>o</sup> & 23<sup>o</sup> Car. II. Cap. 15.

By this Settlement, there is not one of them has above 200 l. per Annum, besides his Glebe, &c. and several of them no more than 100 l. per Annum. Now, what sort of a Maintenance will this be an Age or two hence? Most assuredly in Time the Clergy of the City of London will have the poorest Livings in the whole Kingdom, if they remain upon the Foot they now are. As Trade and Money increase from Time to Time, the Expences of Life must necessarily increase in Proportion; and if so, is it reasonable their Livings should remain the same? Experience has shewn us, that he who had 20 l. per Annum Two hundred Years ago, had as good an Income as he who has now 100 l. per Annum. Therefore I cannot help thinking, that instead of a certain annual Sum of Money, a certain Pound Rate should have been settled; as suppose 8 d. or 9 d. per l. upon the Rents of the Houses within each Parish: and then, as it is very probable that Rents will increase with other things, their

their Livings would increase also, and consequently their Livings continue to be in Value what they now are, and that is no more than a bare Competency for Gentlemen who live in such a City as London. But this must be left to the Wisdom of the Legislature.

As the Consideration of the foregoing Tables naturally led me into this Digression, I hope the Reader will excuse it.

I shall conclude with a Paragraph from Mr. Locke's Essay upon Human Understanding, B. 2. Chap. 16. § 6. which I think very proper to insert, for the Information of such of my Readers, who have not been used to Numbers consisting of a great many Figures.

" I doubt not but we might distinctly number in Words a great deal farther than we usually do, would we find out but some fit Denominations to signify them by; whereas in the way we take now, to name them by Millions of Millions of Millions, &c. it is hard to go beyond eighteen, or at most four and twenty decimal Progressions without Confusion. But to shew how much distinct Names conduce to our well Reckoning, or having useful Ideas of Numbers, let us set all these following Figures in one continued Line, as the Marks of one Number; v.g.

Nonillions. Octillions. Septillions. Sextillions. Quintillions. Quadrillions. Trillions. Billions. Millions. Units.  
857324. 162486. 345896. 437916. 423147. 248106. 235421. 261734. 368149. 623137.

" The ordinary way of naming this Number in English, will be the often repeating of Millions, of Millions, of Millions, of Millions, of Millions, of Millions, of Millions, which is the Denomination of the second six Figures. In which way it will be very hard to have any distinguishing Notions of this Number: But whether, by giving every six Figures a new and orderly Denomination, these and perhaps a great many more Figures in Progression might not easily be counted distinctly, and Ideas of them both got more easily to our selves, and more plainly signified to others, I leave it to be considered."

Of

### Of ANNUITIES upon LIVES.

I DID intend to have calculated some Tables, of the probable Values of One, Two and Three Lives, according to the different Ages of Mankind, and at several Rates of Interest: But, as such Tables must be founded upon Observations made upon the Number of Persons dying at such different Ages, and as I could meet with very few such Observations that could be depended on, and those but for a few Years, I laid aside my Design; not doubting but hereafter, when proper Observations shall have been made, some one or other will take the Pains of constructing such Tables.

In order thereunto, if those in whose Power it is, would oblige the Parish Clerks weekly to make a Return of the Age of every Person dying in each respective Parish within the weekly Bills of Mortality, in like manner as they now make their Returns of the Diseases and Casualties; and if the Number dying of every Age were printed at the end of every Year, with the yearly Bill; then there would in Time be a good Foundation to build upon: and when ever this is done in London, it is probable it will be done likewise in other Places both at home and abroad, where Accounts of Births and Burials are kept, which would make the Foundation still more certain; and therefore I hope in time it will be done, tho I may not live to see it.

At present I shall take the Liberty to say, the Valuation of Annuities upon Lives, is no other than Guess-work, and therefore the best Method I can propose to my Reader for their Valuation is, to consider with himself, what Number of Years certain, he supposes to be equal to the Life or Lives in Question, having always regard to the Age, and State of Health of the Annuitant or Annuitants. When any Number of Years certain are agreed upon, the present Value of those Years at any given Rate, is readily found by the fourth Table of Compound Interest, and will be the probable Value of the Life or Lives required.

The common Method of buying these Annuities, is at a certain Number of Years Purchase; for which Reason, I have made the following Table, to shew how long the Annuitant must live, to be reimbursed his Principal Money, with Interest at any given Rate.

The Table is very plain, as appears by this Example.

Suppose 11 Years Purchase is given for an Annuity.

	Yrs. Days.	
Then, if the Annuitant lives	12.200	} he will be reimbursed his Principal with Interest at the Rate of
	13. 9	
	13.200	
	14. 48	
	14.286	
	15.190	
	16.134	
	18.188	
	21.264	
	27.201	
	53.160	
		} per Cent. per Annum.

I chose to make the Fractions of a Year in Days, for the greater Exactness, tho' tis well known Annuities are generally paid, either Half-yearly or Quarterly.

And this is all I shall say with respect to Annuities upon Lives.

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A Table to calculate the Value of Annuities upon Lives.

Continuance of the Lives to reimburse the Annuitants their Purchase Money.

Years Purchase given for a Life or Lives.	Continuance of the Lives to reimburse the Annuitants their Purchase Money.						Years Purchase given for a Life or Lives.
	At 2 per Cent.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	
	Years. Days.	Years. Days.	Years. Days.	Years. Days.	Years. Days.	Years. Days.	
1	1. 7	1. 9	1. 11	1. 13	1. 15	1. 17	1
1½	1.195	1.200	1.204	1.207	1.211	1.215	1½
2	2. 22	2. 28	2. 34	2. 40	2. 46	2. 52	2
2½	2.215	2.224	2.233	2.242	2.251	2.260	2½
3	3. 46	3. 57	3. 70	3. 82	3. 95	3.108	3
3½	3.243	3.259	3.275	3.292	3.309	3.326	3½
4	4. 77	4. 97	4.119	4.140	4.163	4.186	4
4½	4.278	4.304	4.331	4.358	4.385	4.412	4½
5	5.117	5.149	5.182	5.216	5.252	5.289	5
5½	5.323	5.362	5.401	5.440	5.479	5.518	5½
6	6.166	6.212	6.261	6.311	6.364	6.418	6
6½	7. 12	7. 66	7.124	7.184	7.247	7.314	6½
7	7.225	7.289	7.356	7.424	7.493	7.563	7
7½	8. 76	8.149	8.227	8.311	8.397	8.484	7½
8	8.294	9. 13	9.104	9.200	9.304	9.414	8
8½	9.149	9.246	9.350	9.461	9.577	9.697	8½
9	10. 8	10.118	10.236	10.361	10.491	10.625	9
9½	10.234	10.358	10.488	10.624	10.764	10.908	9½
10	11. 98	11.237	11.381	11.530	11.683	11.840	10
10½	11.330	11.481	11.637	11.797	11.961	12.129	10½
11	12.200	12.366	12.537	12.713	12.893	13.077	11
11½	13. 72	13.903	14.089	14.280	14.475	14.674	11½
12	13.313	14.162	15. 36	15.305	16.246	17.234	12
12½	14.193	15. 64	15.329	16.265	17.246	18.285	12½
13	15. 75	15.335	16.264	17.235	18.261	19.358	13
13½	15.326	16.246	17.206	18.216	19.292	20.438	13½
14	16.215	17.163	18.156	19.209	20.340	21.505	14
14½	17.108	18. 85	19.115	20.215	21.43	22.68	14½
15	18. 4	19. 12	20. 82	21.234	22.432	23.705	15
15½	18.269	19.311	20.459	21.617	22.867	24.245	15½
16	19.174	20.251	21.451	22.706	23.916	25.405	16
16½	20. 82	21.197	22.497	23.801	25.001	26.68	16½
17	20.359	22.150	23.49	24.89	26.100	27.98	17
17½	21.275	23.110	24.58	25.98	27.204	29.38	17½
18	22.196	24. 77	25.69	27.09	28.329	30.88	18
18½	23.121	25. 52	26.82	28.21	29.464	32.48	18½
19	24. 51	26. 35	27.95	29.34	30.609	34.17	19
19½	24.351	27. 26	29.08	30.47	31.754	35.96	19½
20	25.291	28. 26	30.21	31.60	32.899	37.85	20
20½	26.235	29. 35	31.34	32.73	34.044	39.84	20½
21	27.185	30. 54	32.47	33.86	35.189	41.93	21
21½	28.141	31. 83	33.60	35.00	36.334	44.12	21½
22	29.102	32.123	34.73	36.13	37.479	46.41	22
22½	30. 69	33.175	35.86	37.26	38.624	48.80	22½
23	31. 42	34.238	36.99	38.39	39.769	51.29	23
23½	32. 22	35.315	38.12	39.52	40.914	53.88	23½
24	33. 8	37. 39	39.25	40.65	42.059	56.47	24
24½	34. 1	38.144	40.38	41.78	43.204	59.16	24½
25	35. 1	39.263	41.51	42.91	44.349	61.85	25

A Table to Calculate the Value of Annuities upon Lives.

Continuance of the Lives to reimburse the Annuitants their Purchase-Money.

Years Purchase given for a Life or Lives.	Continuance of the Lives to reimburse the Annuitants their Purchase-Money.						Years Purchase given for a Life or Lives.
	At 5 per Cent.	6 per Cent.	7 per Cent.	8 per Cent.	9 per Cent.	10 per Cent.	
	Years. Days.	Years. Days.	Years. Days.	Years. Days.	Years. Days.	Years. Days.	
1	1. 19	1. 23	1. 27	1. 30	1. 34	1. 38	1
1½	1.218	1.226	1.233	1.241	1.249	1.257	1½
2	2. 58	2. 71	2. 84	2. 97	2.111	2.125	2
2½	2.269	2.288	2.308	2.328	2.350	2.37	2½
3	3.121	3.148	3.177	3.207	3.238	3.271	3
3½	3.344	3.374	3.404	3.434	3.464	3.494	3½
4	4.209	4.259	4.312	4.364	4.416	4.468	4
4½	5. 82	5.146	5.216	5.292	5.368	5.444	4½
5	5.327	6. 44	6.134	6.233	6.342	6.451	5
5½	6.216	6.319	6.428	6.542	6.661	6.780	5½
6	7.113	7.241	7.374	7.511	7.652	7.797	6
6½	8. 20	8.176	8.354	8.536	8.721	8.909	6½
7	8.303	9.127	9.348	9.574	9.804	10.037	7
7½	9.231	10. 95	11. 1	11.331	11.564	11.801	7½
8	10.172	11. 81	12. 49	13.100	13.702	14.307	8
8½	11.125	12. 88	13.131	13.794	14.458	15.124	8½
9	12. 92	13.119	13.554	14.254	14.999	15.745	9
9½	13. 75	14.177	14.60	15.348	16.094	16.841	9½
10	14. 75	15.265	15.790	16.503	17.242	17.981	10
10½	15. 94	16.423	17.059	17.766	18.521	19.271	10½
11	16.134	17.688	18.439	19.206	19.957	20.718	11
11½	17.196	18.954	19.816	20.544	21.404	22.164	11½
12	18.285	20.309	21.289	22.177	23.164	23.915	12
12½	20. 38	21.289	22.389	23.521	24.718	25.671	12½
13	21.189	22.360	23.521	24.874	26.094	27.367	13
13½	23. 13	23.813	25.177	26.644	27.918	29.121	13½
14	24.247	25.164	26.644	28.206	29.518	30.874	14
14½	26.168	26.644	28.206	29.818	31.177	32.731	14½
15	28.151	28.189	29.818	31.544	33.142	34.794	15
15½	30.209	29.818	31.544	33.394	35.318	37.067	15½
16	32.360	31.544	33.394	35.777	37.718	39.451	16
16½	34.604	33.479	35.777	38.294	40.344	42.045	16½
17	36.943	35.521	38.294	40.944	43.109	44.859	17
17½	39.377	37.681	40.944	43.737	46.024	47.894	17½
18	41.906	39.959	43.737	46.674	49.099	51.151	18
18½	44.531	42.354	46.674	49.764	52.434	54.641	18½
19	47.254	44.877	49.764	53.000	56.039	58.364	19
19½	50.077	47.539	53.000	56.404	60.024	62.441	19½
20	53.000	50.344	56.404	60.000	64.409	67.074	20
20½	56.039	53.309	60.000	64.800	69.318	72.374	20½
21	59.294	56.444	64.800	70.000	74.764	78.441	21
21½	62.767	59.759	69.764	75.600	80.864	85.274	21½
22	66.460	63.254	75.600	81.600	87.624	92.881	22
22½	70.383	66.939	81.600	88.000	95.054	101.374	22½
23	74.547	70.814	88.000	94.800	103.174	110.764	23
23½	78.962	74.889	94.800	102.000	112.009	121.154	23½
24	83.627	79.174	102.000	109.600	121.664	132.644	24
24½	88.552	83.679	109.600	117.600	132.164	145.334	24½
25	93.737	88.404	117.600	126.000	143.514	159.334	25

AND now to conclude the Whole, I shall give a short Account of our Money, or the Silver Coin of this Kingdom, from the Conquest down to this Time, with respect to the Denominations of the several Pieces, its Weight and Fineness, and the Rate of Interest which from time to time has been allowed by Law to be taken for the Loan of it.

Our Accounts of Money have always been kept in Pounds, Shillings, Pence, and Farthings; and tho the Weight of them has frequently been altered, and the Fineness sometimes, yet they have always born the same Proportion one to the other as they do at this Day.

A Pound was so called, because antiently Twenty Shillings, or Two hundred and forty Pence weighed a Pound, or twelve Ounces Troy weight; but there never was any such piece of Silver coined.

There was a small difference in the Payments which were made in the King's Exchequer, between One Pound and another, there being three sorts of them, the Pound de Numero, ad Scalum, and ad Pensum; as may be seen in Madox's History of the Exchequer, p. 187. but I think not very material to be inserted here.

A Shilling was always the 20th part of a Pound, and was for many Ages only Nominal, there not having been any such Piece coined till the 19 H. VII.

A Penny was always the 12th part of a Shilling, and was the first Piece of Silver Coin we have any Notice of; it was also in antient Times called a Sterling, as may be seen in the Statutes of 51 H. III. and 31 E. I. And it is for this Reason our Money then was, and still is, called Sterling Money.

A Farthing was always the 4th part of a Penny, and that, and the Half-penny were Silver Coins; Half-pence and Farthings of Copper, not having been coined by any legal Authority, till the Reign of King Charles II.

Pence, Half-pence, and Farthings, were the only Silver Coin in England, till 27 E. III. when Groats, and Half-groats were first coined: they were then called Grosses, because of their being so much larger than any Silver Pieces coined before.

When Shillings were first coined, I have mentioned above.

Crowns, Half-Crowns, Six-penny, and Three-penny pieces, were first coined by E. VI. And by Q. Eliz. pieces of Three-half-pence, and Three-farthings were coined; and these are all the several Species of Silver Coin, that I have met with.

In an Ordinance of Parliament, passed 17 July 1649, is the following Table, which is there said to express the true Values and Weights of the Silver Coin, according to the Account of the Mint, within the Tower of London.

The Piece of	s. d.	Penny Wts.	Grains.	Mites.	Droits.	Perits.	Blanks.
5. —	—	19	8	10	8	—	—
2. 6	—	9	16	5	4	—	—
1. —	—	3	20	18	1	10	—
6	—	1	22	9	—	15	—
2	—	—	15	9	—	16	—
1	—	—	7	14	—	20	12
$\frac{1}{2}$	—	—	3	17	—	10	6

Memorandum, Twelve Ounces makes a Pound weight Troy; Twenty Penny-weight makes an Ounce; Twenty four Grains make a Penny-weight; Twenty Mites makes a Grain; Twenty four Droits makes a Mite; Twenty Perits makes a Droit; Twenty four Blanks makes a Perit.

This being the only Table I ever saw, which gives the Weight of the particular Pieces of Money, I was willing to insert it as a Curiosity, tho I think some of the Weights therein mentioned to be only

only imaginary, and in particular the Blank; for surely no one supposes there can be any real Weight, that is but the Two hundred and thirty thousand four hundredth part of a Grain.

The words Sterling, old Sterling, antient Sterling, and Standard, when applied to Money, are all of the same Signification, and mean such coined Money as hath eleven Ounces and two Penny-weight of fine Silver, and eighteen Penny-weight of Alloy in every Pound weight of such Money. This has been our Standard for the Fineness of the Coin, from the Norman Conquest, down to this very time; the short space between the latter end of H. VIII. and the beginning of Q. Eliz. only excepted.

But tho the Fineness hath had so little Alteration, it hath been otherwise with the Weight, for that hath undergone many Alterations from time to time: so that instead of twenty Shillings weighing a Pound, as it antiently did, there is now no less than sixty two Shillings in a Pound weight; as may be particularly seen in the following Table.

A Table shewing the several Alterations which have been made, from time to time, in the Weight and Fineness of the Silver Coins.

Years.	Money by Tale, in a Pound weight Troy.		Fine Silver in a Pound weight.		Alloy in a Pound weight.	
	s.	d.	oz.	dwt.	oz.	dwt.
From the Conquest to the Reign of E. 3.	20.	—	11.	2	—	18
20 E. 3.	22.	6	11.	2	—	18
27	25.	—	11.	2	—	18
9 H. 5.	30.	—	11.	2	—	18
1 H. 6.	37.	6	11.	2	—	18
4	30.	—	11.	2	—	18
39	37.	6	11.	2	—	18
1 H. 8.	45.	—	11.	2	—	18
34	48.	—	10.	—	2.	—
36	48.	—	6.	—	6.	—
37	48.	—	4.	—	8.	—
3 E. 6.	72.	—	6.	—	6.	—
5	72.	—	3.	—	9.	—
6	60.	—	11.	1	—	19
1 Marie.	60.	—	11.	—	1.	—
2 Elizabeth.	60.	—	11.	2	—	18
43	62.	—	11.	2	—	18

In the Times when these Alterations were made, there was little Commerce in the Kingdom, and that little chiefly carried on by foreign Merchants; notwithstanding which, the Effects which those Alterations produced, were bad enough: but, how very mischievous the Consequences of making an Alteration in our Time would have been, when Trade both Domestick and Foreign is at so great an height, is dreadful to imagine: and yet, about thirty Years ago there was a bold Attempt made, to raise the Value of the Coin, for so it was falsely called, from sixty two Shillings, to seventy seven Shillings and six Pence the Pound weight. That such a vile Project did not succeed, was in a great Measure owing to those excellent Pieces relating to the Coin, wrote by Mr. John Locke, and which the Reader may find in the Second Volume of his Works.

Mr.

Mr. Lowndes in his *Essay for Amendment of the Silver Coins*, p. 34. says, there is an Indenture in the Exchequer of 28 E. I. which mentions a Pound of *Old Sterling* to be coined into twenty Shillings and three Pence; and from him, the late Bishop *Fleetwood* in his *Chronicon Pretiosum*, p. 52. says to the same Effect: but I believe it to be a Mistake. For the *Ordinance for Measures*, made 31 E. I. which was three Years after, is in these Words: "By Consent of the whole Realm of *England*, the King's Measure was made, so that an *English* Penny, which is called the Sterling, round, without Clipping, shall weigh xxxii Grains of Wheat well dried, and gathered out of the middle of the Ear: and xx Pence make an Ounce; and xii Ounces make a Pound; and viii Pounds make a Gallon of Wine; and eight Gallons of Wine make a Bushel of *London*, which is the eighth part of a Quarter." By which I think it very plain, that there were at that time but 240 Pence in a Pound, which is exactly twenty Shillings; and what confirms me in this is, That this Statute of 31 E. I. is almost in the same Words with that made 51 H. III. at which time I suppose it is agreed, that a Pound of Silver was coined into no more than twenty Shillings; and therefore I have in the Table set down the first Alteration to be made 20 E. III. from twenty Shillings, to twenty two Shillings and six Pence the Pound, tho it is of no great Moment which of us is mistaken in this Matter.

In the same *Essay*, p. 93. there is a very particular Description of the manner of making both the *Gold* and *Silver Coins* at the Mint, which I have taken the Liberty to transcribe, as follows. "All the Moneys we have now in *England*, both *Gold* and *Silver*, are reducible to two sorts; the one stamp'd with a Hammer, and the other prest with an Engine, called the *Mill*. The *Gold* or *Silver* of the hammer'd Money, is first cast from the melting Pot into long Bars, those Bars are cut with Sheers into several square Pieces of exact Weights, for Sovereigns, Angels, Crowns, Half-Crowns, Shillings, &c. Then with the Tongs and Hammer they are forged into a round Shape, after which they are blanched, that is, made white or refulgent by Nealing or Boiling, and afterwards stamp'd or impress'd with an Hammer to make them perfect Money. This method of making Money with the Hammer, was practis'd in the Reign of King *Edward I.* who, amongst other great Achievements of his most prudent Government, left that of restoring and establishing good Moneys for the Use of his People, to recommend his Name to subsequent Generations. He sent for Mr. *William de Turnemire*, and his Brother *Peter*, and others from *Marseilles*, and one *Friscoald* and his Companions from *Florence*; and employ'd them in the working this kind of Money, and the buying and exchanging of Silver for that Purpose: for which he had thirty Furnaces at *London*, eight at *Canterbury*, besides three the Archbishop had there, twelve at *Bristol*, twelve at *York*, and more in other great Towns; in all which Places they made the said hammer'd Money of Silver, supplied by the King's Changers established at the same Places, who according to certain Rates or Prices prescribed to them, took in the Clipp'd, Rounded and Counterfeit Moneys, to be recoined, and bought *Gold* and *Silver* of the Merchants and others, to be fabricated into New Money; at the same time ordaining, *Quod Proclametur per totum Regnum quod nulla fiat tonsura de nova Moneta sub periculo Vite, & Membrorum; & amissionis omnium Terrarum & Tenementorum*, &c. And this kind of hammer'd Money continued thro' all the Reigns of succeeding Kings and Queens, till about the Year of our Lord 1663. when by several Warrants, and Command of King *Charles II.* the other sort called *Milled Money* was first fabricated, to be current in *England* in this manner: First, the *Gold* or *Silver* is cast out of the melting Pot into long flat Bars, which Bars are drawn thro' a Mill, wrought by a Horse, to produce the just Thickness of *Guineas*, *Half-Guineas*, *Crowns*, *Half-Crowns*, *Shillings*, &c. Then with forcible Engines, called *Cutters*, which answer exactly to the respective Sizes or Dimensions of the Money to be made, the round Pieces are cut out from the flat Bar, shaped as aforesaid; the residue whereof, called *Sizel*, is melted again: and then every Piece is weighed and made to agree exactly with the intended Weight, and afterwards carried to other Engines, wrought secretly, which put the Letters upon the Edges of the larger *Silver* Pieces, and mark the Edges of the rest with a Graining. The next thing is the *Blanching*, performed as above; and at last, every Piece is brought to the Press, which is called the *Mill*, wrought by the Strength of Men, and there receives the Impression, which makes it perfect *Milled Money*."

And this was the first *Milled Money* which was made by any of our Kings: But, the first of this sort of Money was really coined by *Oliver Cromwell*, in the Year 1658. and is the most beautiful Coin I ever saw; but it being done the same Year in which he died, there was, as I suppose, no great Quantity of it, and therefore 'tis now scarce to be met with.

Besides

Besides the recoining by *Edward I.* abovementioned, the Money was in a manner all recoined again by *Queen Elizabeth*, occasioned by the wretched debasement of it by her Father and Brother; and this was deservedly look'd upon as one of the Glories of her Reign.

It was again recoined by King *William III.* and this last recoining was occasioned by one of the most unaccountable Negligences that ever a Government was guilty of. Bishop *Fleetwood*, in his *Chronicon Pretiosum*, which I have before mentioned, p. 57. speaking of this Matter, has the following Remark: "It will be much for the Honour of the late Reign, to have remedied the greatest Abuse of Money, that was ever known in *England*, at a Time of the greatest Danger and Expence, with very little Grievance of the People. But sure, 'tis better to prevent a moderate Mischief, than redress a very great one; and perhaps, a Proclamation of three or four Lines, forbidding any clipped Money to be received into the King's Exchequer in 1690, would have prevented the clipping and spoiling five Millions." And I am intirely of Opinion with the Bishop, that the Government might have prevented it, with a great deal of Ease.

That most wicked Trade of Clipping was begun in the time of the Civil War; but the Parliament put an early stop to it, by an Ordinance they pass'd the 6th September 1647. the first Clause of which is in these Words: "Forasmuch as during these Distractions, great Sums of Moneys clipped and unlawfully diminished, have been disperfed and given out amongst the People throughout the Kingdom; for the speedy suppression thereof, and prevention of the like in the future, be it Ordained, by the Lords and Commons in Parliament assembled, That from henceforth no Money diminished by Clipping or Filing, shall be current or payable in this Kingdom, or be offered in Payment, or received as due Payment, by any Person whatsoever, but be esteem'd as Bullion, and no otherwise." This Ordinance expiring upon the Restoration of King *Charles II.* the Trade of Clipping was again revived, but not the Law to prevent it: And is it not an amazing thing, that it should be suffer'd to go on for the space of Thirty five Years, without putting any stop to it, when at the same time there was such a Precedent before them, which, if followed, would have so effectually cured the Evil?

What makes it still more surprizing is, That when the Earl of *Rochester* was made Lord Treasurer by King *James II.* he established an Order, that the *Tellers* should weigh every Bag of Money they received at the Exchequer; so that for above ten Years before the recoining, it was known at the Receipt there, how the Money diminished from time to time in its Weight, till the Bags of 100 l. each in Tale, which should have weighed, according to the Standard of the Mint, 32 l. 3 oz. 1 dwt. 22 gr. weighed no more than 16 l. 6 oz. 18 dwt. upon a Medium one with the other: As may be seen in the *Essay* before-mentioned.

However, by the wise and prudent Methods taken by his then Majesty, his Ministry, and Parliament, the Disease was cured at last, and we have been happy in enjoying the benefit of a noble Coin ever since.

I have purposely omitted saying any thing of the *Gold Coins*, or of the *Silver Coins* before the *Conquest*; but if the Reader desires any Information about them, let him read *Chronicon Pretiosum*, that curious and instructive Piece which I have before quoted, and I doubt not but it will give him a pleasurable Satisfaction.

As

As to *Usury*, or the taking of any Interest for the Loan of Money, it was in former Days by most *Christians* deemed absolutely unlawful, and therefore practised by very few, except those old *Ufurers the Jews*, who tho forbidden by the Law of *Moses* to lend upon *Usury* to their Brethren, yet they never made any scruple of Trading that way with those who were not of their own Nation.

The *Jews* were first brought into *England* by *William* the Conqueror, and being then a numerous Body, they settled in most of the Cities and great Towns of the Kingdom, where they chiefly followed the Trade of *Usury* for many Reigns after; but becoming odious by their Extortions, they were totally expelled, to the great Joy of the People, about the 18th of *E. I. Anno Dom.* 1290.

*Fabian*, in his Chronicle, the 47th of *H. III. Anno Dom.* 1263, which was about 27 Years before this Expulsion, gives the following Relation: "In this passetyne on Palme-sondaye weeke all the *Jews* in *London* were spoiled and robbed, and the number of fyve hundred of theym were slayne, and dyvers of theyr manysions brent and destroyed, and such as of theym were saved, were conveyed for great neede unto the Towre, and there kepte from the furye of the commons. Whereof the occasion was, for so much as a *Jewe*, woulde have forced a *Christen* manne to have geven unto hym *more* then twopence, for the usurye of twentye shyllinges for a weeke. For ye shall understand, that those daies by licence graunted unto the *Jewes* of the king, they myght take by usurye of every man that of theym woulde borowe money, two pence of a pounce for a weeke lending, and so of greater and of smaller summes, after that rate." And *Stowe* relates it much to the same purpose, but places it one Year sooner; so that it may be supposed, the common Interest they took for the Loan of Money, was about 40 l. *per Cent. per Annum.*

There is no room to doubt but that their *Usury* was very exorbitant, but then it is most certainly true, that as they fleeced the Subjects, the King fleeced them, and by *Tallages, Fines, Amerciements, &c.* drew a considerable Revenue from them. Part of the King's Exchequer was set apart purposely for the Receipt and Management of this Revenue, and was called the *Exchequer of the Jews*: there were Persons called *Justices of the Jews*, and Clerks and others under them for this particular Business; the Counterparts of their *Chirographs*, and of their *Starrs*, were laid up in Chests kept for that purpose, under the Care of the King's Officers; and by these means their Estates were, in a great measure, under the Power of the King, who taxed them at his Pleasure. These *Chirographs* were written Contracts, of the same Nature with our Bonds and Mortgages, and their *Starrs* like our general Releases. An Account at large, of this Affair relating to the *Jews*, may be seen in *Madox's History of the Exchequer*, Chap. 7.

After the Banishment of the *Jews*, there were from time to time many Laws and Ordinances made, as well by the Church as State against *Usury*; but all to little or no purpose, for Persons who wanted Money, and were willing to give great Interest, always found those who would lend enough to supply their Wants upon good Security.

Therefore, as the Practice could not be prevented, the Parliament *Anno 37 H. VIII. cap. 9.* made an Act to prohibit the taking more than 10 *per Cent.* and great Penalties were to be inflicted on those who should take above that Rate: This Act commenced from 31st *January* 1545, and is the first Act of Parliament in which I find any Rate of Interest mentioned. In this Act *Usury* was declared to be a thing unlawful.

In

In less than seven Years, *Anno 5 E. VI. cap. 20.* the forementioned Statute was repealed; and it was enacted, That no Person by any means should lend or forbear any Sum of Money, for any manner of *Usury* or *Encrease*, to be received or hoped for, above the Sum lent; and this under severe Penalties.

*Anno 13 Eliz. cap. 8.* The Statute of *E. VI.* was repealed, and that of *H. VIII.* was revived, with additional Clauses, still prohibiting the taking above 10 *per Cent.* This Act commenced from the 25th of *June* 1571, and in it are these Words, That all *Usury* being forbidden by the Law of God, is *Sin, and Detestable.*

When this Act was depending in the House of Commons, there were warm Debates about it, in which *Usury* had a great many hard Names given it: It was said to be *preter Naturam, idem ac hominem occidere, proxima homicidio, Malum in Se, and Damnabile.* As may be seen at large in *D'Ewe's Journal of Queen Elizabeth's Parliaments*, p. 171. & Seq.

*Anno 21 Jac. I. cap. 17.* It was made Penal to take above 8 *per Cent.* This Act commenced from the 24th of *June* 1625, and concludes thus, *Provided, That no Words in this Law contained, shall be construed or expounded to allow the practice of Usury, in Point of Religion or Conscience.*

After this, I cannot find in any Act of Parliament, that *Usury*, or the taking Interest for the Loan of Money, is said to be unlawful; but if any of my Readers think it is, let them read *Grotius, Of the Rights of War and Peace*, B. 2. Chap. 12. and *Puffendorf, Of the Law of Nature and Nations*, B. 5. Chap. 7. and I doubt not of their being fully satisfied.

*Anno 12. Car. II. cap. 13.* It was made Penal to take above 6 *per Cent.* This Act commenced from 29th of *September* 1660. Note, The Interest of Money was reduced from 8 to 6 *per Cent.* nine Years before, by an Ordinance passed the 8th of *August* 1651, and which commenced the 29th of *September* following; but this being made in the time of *Usurpation*, could be of no force after the Restoration of *King Charles II.*

*Anno 12. Anna. cap. 16.* It was made Penal to take above 5 *per Cent.* This Act commenced from the 29th of *September* 1714. and remains in force at this Time.

Having thus given a short Account of *legal Interest*, it will not be improper to add, that there is likewise a *natural Interest of Money*, which may be very well compared to the Market Price of other Commodities; I say other, for I look upon Money it self to be a Commodity, which like others rises and falls as there is a Demand for it; and therefore I have known, when the legal Interest was 6 *per Cent.* Money enough to be had at 5 or 4½ *per Cent.* and sometimes under that Rate; on the contrary, I have known since the legal Interest was at 5 *per Cent.* that 10 *per Cent.* and more, has been given for the Loan of Money, not for a Year, but for a very few Days. This I think plainly shews, that no Law can absolutely fix the Interest of Money.

It is to be observed, that till the Year 1625, the legal Interest was never under 10 *per Cent.* and that within the space of Ninety Years after that time, it was reduced to 5 *per Cent.*

This is owing to the great encrease of Trade in this Kingdom: For, the encrease of Trade under proper Regulations, will always be attended with an encrease of Wealth; and as Riches encrease, the Interest of Money will sink in Course, whether there be, or be not a Law for that purpose.

R

Then,



Then, as Trade flourishes most in a Country where the Property of every Man is secure, what may not we expect of this kind? The late GLORIOUS REVOLUTION, and the Accession of the present PROTESTANT Family to the Throne, having, in all human probability, secured to us both our Civil and Religious Rights for Ages to come.

It was with this pleasant View, that I began all the foregoing Tables, with such low Rates of Interest, and doubt not but that those low Rates will be useful, at least to the next Generation; being firmly persuaded, that nothing but our own Folly, can hinder us from being the most opulent People in Europe, and as such the envy of all the rest.

GOD grant, That as we encrease in Riches, we may also encrease in good Works; that we may be more Virtuous, as well as Richer than our Neighbours; and in particular, that we may guard against Luxury, that constant attendant on, and almost as constant a Canker to, Riches, that it may not grow to such a height as to end in our Destruction, as it has of many flourishing Kingdoms and States in former Ages.

Then we may expect a Blessing upon all our honest Endeavours, and that in our Days, and in those of our Children's Children after us, *Peace will continue to be within our Walls, and Plenty within our Dwellings.* A M E N.

The

*The several PROBLEMS, answered by the Tables of Compound Interest.*

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- 1<sup>st</sup>. Any Principal, Rate and Time being given, to find the Amount.
- 2<sup>d</sup>. —Principal, Rate and Amount ————— Time.
- 3<sup>d</sup>. —Principal, Time and Amount ————— Rate.
- 4<sup>th</sup>. —Amount, Rate and Time ————— Principal.
- 5<sup>th</sup>. —Principal, Rate and Time ————— Annuity.
- 6<sup>th</sup>. —Principal, Annuity and Rate ————— Time.
- 7<sup>th</sup>. —Principal, Annuity and Time ————— Rate.
- 8<sup>th</sup>. —Annuity, Rate and Time ————— Principal.
- 9<sup>th</sup>. —Annuity, Rate and Time ————— Amount.
- 10<sup>th</sup>. —Annuity, Rate and Amount ————— Time.
- 11<sup>th</sup>. —Annuity, Time and Amount ————— Rate.
- 12<sup>th</sup>. —Amount, Rate and Time ————— Annuity.
- 13<sup>th</sup>. —Principal Sum in Reversion, Rate and Time ————— Present Value.
- 14<sup>th</sup>. —Annuity, Time in Reversion, and Rate ————— Present Value.
- 15<sup>th</sup>. —Annuity, several times in Reversion, and Rate ————— Several Present Values.
- 16<sup>th</sup>. —Annuity in Fee Simple, and Rate ————— Present Value.
- 17<sup>th</sup>. —Present Value, Time in Reversion, and Rate ————— Annuity.
- 18<sup>th</sup>. —Annuity in Reversion, Present Value, and Rate ————— Time.
- 19<sup>th</sup>. —Annuity in Reversion, Present Value, and Time ————— Rate.
- 20<sup>th</sup>. —Principal, and Rate ————— Annuity in Fee Simple.
- 21<sup>st</sup>. —Principal, Annuity and Rate ————— Amount.
- 22<sup>d</sup>. —Principal, Annuity and Time ————— Amount.
- 23<sup>d</sup>. —Annuity, Amount and Time ————— Principal.
- 24<sup>th</sup>. —Annuity, Amount and Rate ————— Principal.
- 25<sup>th</sup>. —Amount, Principal and Time ————— Annuity.
- 26<sup>th</sup>. —Amount, Principal and Rate ————— Annuity.
- 27<sup>th</sup>. —Amount, Principal and Annuity ————— Time.
- 28<sup>th</sup>. —Amount, Principal and Annuity ————— Rate.

F I N I S.

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